

Exploring the Link between Intimate Partner Violence and Child Maltreatment

By
Laura Robinson

A thesis submitted to the Faculty of Science
The University of Birmingham for the degree of
DOCTOR OF FORENSIC PSYCHOLOGY

Centre for Forensic and Criminological Psychology
School of Psychology
Faculty of Science
The University of Birmingham
February 2014

UNIVERSITY OF
BIRMINGHAM

University of Birmingham Research Archive

e-theses repository

This unpublished thesis/dissertation is copyright of the author and/or third parties. The intellectual property rights of the author or third parties in respect of this work are as defined by The Copyright Designs and Patents Act 1988 or as modified by any successor legislation.

Any use made of information contained in this thesis/dissertation must be in accordance with that legislation and must be properly acknowledged. Further distribution or reproduction in any format is prohibited without the permission of the copyright holder.

Acknowledgements

I'd like to thank the staff in the Forensic Psychology department at University of Birmingham for their guidance and brilliance over the last three years. In particular, I want to thank my supervisor Dr Louise Dixon whose kindness and enthusiasm has made this whole experience so positive for me.

Thanks also to the rest of the research team Clare Edwards, Dr. Geoff Debelle and Chief Supt. Rachel Jones for their ideas, suggestions and feedback and to the British Association for the Study and Prevention of Child Abuse and Neglect for their funding of this project.

Thanks also to my partner Ben whose patience and support has meant so much to me and to April whose friendship, encouragement and proof-reading skills I have been truly grateful for.

Finally, my deepest thanks and gratitude to my mother and father who have always believed in me and sacrificed so much to help me succeed.

Abstract

This thesis aims to further psychological understanding about Intimate Partner Violence (IPV) and Child Maltreatment (CM) and the overlap in risk factors for both forms of family violence. In order to explore this, a systematic literature review, psychometric critique and empirical study are presented.

Chapter One provides the context for this thesis while Chapter Two provides a systematic review of the current literature regarding risk profiles of perpetrators of concurrent IPV and CM. This review found that perpetrators of concurrent abuse had a higher prevalence of substance abuse, mental health difficulties, convictions for violence outside the family home, childhood victimisation and lower levels of education. Chapter Three provides a critique of the Danger Assessment (Campbell, Webster & Glass, 2009), an IPV risk assessment tool used to assess the risk of Intimate Partner Homicide and IPV in Chapter Four. The empirical research project in Chapter Four investigated how effective, reliable and valid the Multi-agency Joint Screening process and the Barnardo's Multiagency Domestic Violence Risk Identification Threshold Scales (MDVRITS) are in identifying the risk and needs of children who reside in a family where an incident of IPV has been reported to the police. This study found that the Multi-agency Joint Screening process was effective, particularly in relation to the intervention and management of higher risk cases. Recommendations were made regarding the management of lower risk cases as well as more consistent adherence to the MDVRITS scale guidelines. Chapter Five draws the thesis together and outlines research and practice implications of the thesis.

Recommendations are made regarding the adoption of a holistic approach to family violence that views IPV and CM as interactive and dynamic family issues rather than isolated issues.

Table of Contents

Chapter One:	Introduction
Chapter Two:	Examining Differences in Risk Profiles of Families who Experience Intimate Partner Violence and Child Maltreatment Concurrently or in Isolation: A Systematic Literature Review
Chapter Three:	A critique of a psychometric assessment: The Danger Assessment
Chapter Four:	An Empirical Investigation into the Process and Outcomes of Multi- Agency Joint Scrutiny of Police Notifications: A Feasibility Study
Chapter Five:	Discussion
	References
	Appendices

List of Tables

Chapter Two:

Table 1. Studies Included in the Review and Results of Research Question 1	36
Table 2. Results of Research Question 2	53
Table 3. Results of Research Question 3	56

Chapter Four:

Table 4. Gender of perpetrator and victims during IPV incident	113
Table 5. Number of children present in household during IPV incident	115
Table 6. Table showing whether child directly witnessed IPV incident.....	116
Table 7. Description of alleged perpetrator's relationship to child involved in IPV incident	117
Table 8. Table showing whether alleged perpetrator of IPV incident was living in family home at the time of the incident	118
Table 9. Nature of IPV incident.....	120
Table 10. Physical injuries sustained during IPV incident categorised by gender	121
Table 11. Risk profiles for each level at time of incident based on the Spousal Assault Risk Assessment and Danger Assessment items.....	125
Table 12. Outcomes for cases during 12 month follow-up.....	131
Table 13. Additional screenings during year follow-up	133
Table 14. Demographic and Risk Profiles for the six individual cases which escalated in risk during the year follow-up period	135
Table 15. A summary of the risk profiles of Scale 1 and Scale 2 cases that increased in risk to a Scale 3 or 4 during year follow-up period compared to Scale 1 and Scale 2 cases which did not escalate in risk during the follow-up period	137
Table 16. Inter-rater reliability of mock case screening level allocations at Time1 and Time 2	138

List of Figures

Chapter Two:

Figure 1. Diagram of data selection process 33

Chapter Four:

Figure 2: Multi-agency Joint Screening Process Flowchart 98

Figure 3: Bar chart showing the mean age of alleged perpetrators and victims of IPV incidents in the study sample according to scale level (N = 182) 114

Figure 4: Pie chart showing ethnicity of victims of IPV in sample (N=93) 114

Figure 5 and Figure 6: Bar charts showing percentage of IPV incidents in the sample in which the perpetrator was arrested and charged with an offence relating to the IPV incident (N=93). 127

Figure 7: Bar chart showing percentage of incidents in which the victim supports the prosecution of the perpetrator of the IPV incident. 128

List of Appendices

Appendix A. Quality Assessment Form for Cross-sectional Studies	177
Appendix B. Quality Assessment Form for Case-control Studies.....	178
Appendix C. Completed data extraction forms.....	179
Appendix D. Data Extraction Form	191
Appendix E. Excluded papers	192
Appendix F. MDVRITS protocol	193
Appendix G. Community Healthcare NHS Trust Ethical Clearance Letter	194
Appendix H. University of Birmingham STEM Ethical Clearance Letter	196
Appendix I. West Midlands Police Placement Clearance Letter	197
Appendix J. University of Birmingham STEM Amendment Clearance Letter	198
Appendix K. Coding Dictionary	199
Appendix L. Information sheet for Joint Screening Professionals	204
Appendix M. Consent Sheet for Joint Screening Professionals	206
Appendix N. Focus Group Interview Schedule	207

CHAPTER ONE
INTRODUCTION

Introduction

Family violence is defined as violence between people related by blood or marriage, those in intimate relationships, sharing biological parenthood or those living as a family, and encompasses a wide range of behaviours including physical violence, threats of violence, sexual abuse, and psychological abuse (Tajima, 2004). Family violence can take five forms; intimate partner violence (IPV), child maltreatment (CM), parent abuse, elder abuse and sibling abuse (Browne & Herbert, 1997). These forms often co-occur, that is, if one form exists in the family there is an increased risk of other forms occurring (Browne & Herbert, 1997). While different types of family violence are discussed and often researched in isolation, it is important to realise that all forms of violence in the family are interrelated and have an impact on the family as a whole (Browne & Herbert, 1997). As such, researchers and professionals have stressed the need to understand family violence and recognise the importance of family dynamics rather than understanding one form of abuse in isolation (Dixon, Hamilton-Giachritsis, Browne, & Ostapuk, 2007). Despite this recognition, much research continues to focus on these forms of family violence in isolation from one another (Dixon et al., 2007) and although multi-agency improvements have been made in recent years (Thiara & Chung, 2008), practice responding to the two forms remains disjointed (Dixon et al., 2007). This thesis aims to bridge that gap by providing an exploration of both forms of family violence with a view to providing implications for practice.

Child Maltreatment (CM)

Research into the area of child maltreatment has been, and continues to be hampered by the lack of a clear operational definition of child maltreatment. Furthermore, there continues to be a wide range of definitions used in the past and current literature. The National Society for the

Prevention of Cruelty to Children (NSPCC) have adopted the World Health Organisation's definition of child maltreatment: "all forms of physical or emotional maltreatment, sexual abuse, neglect or negligent treatment or commercial or other exploitation, resulting in actual or potential harm to the child's health, survival, development or dignity in the context of a relationship of responsibility, trust or power" (Radford et al., 2011; p.7). Child maltreatment can be considered to be direct- when somebody may abuse or neglect a child either by inflicting harm, or indirect- by failing to act to prevent harm. In addition, child maltreatment can take place in a family, institutional or community setting; by family members, others known to them or more rarely, by a stranger (NSPCC, 2010). Prevalence rates focussing specifically on child maltreatment by a parent or guardian indicate that 24.5% of children in the UK have experienced one or more incidents of physical violence, sexual abuse, emotional abuse or neglect by a parent or guardian during their childhood (Radford et al., 2011).

Many different models of child maltreatment have been presented over the years. Over time, factors such as parent's psychological makeup, family interaction, societal stress or child characteristics have all been proposed to individually contribute to child maltreatment (Belsky, 1980). More recently, efforts have been made to embed these various aetiological factors identified as influential in the maltreatment process into a framework that considers child maltreatment as the outcome of many factors and multiple levels (Belskey, 1980). This ecological perspective is arguably the most comprehensive because it defines the broad range of influences on the aetiology of child maltreatment, but also recognises the interaction of these factors (Cicchetti & Lynch, 1993).

The ecological framework was first developed to by Bronfenbrenner (1979) to understand child development. The framework has been applied to many other social problems

such as intimate partner violence in addition to accounting for the aetiology of child maltreatment. In particular, Belsky (1980) built on the work of Bronfenbrenner (1979) to present a framework conceptualising child maltreatment as a social-psychological phenomenon that is determined by factors in the individual (ontogenic development) and the family (the microsystem), as well as in the community (the exosystem) and the culture (the macrosystem) in which both the individual and the family are embedded.

Intimate Partner Violence (IPV)

IPV is defined as “any incident or pattern of incidents of controlling, coercive or threatening behaviour, violence or abuse between those aged 16 or over who are or have been intimate partners or family members regardless of gender or sexuality” (Home Office, 2013, p. 2). Of the various forms of violence, it is recognised that issues relating to IPV affect a considerable proportion of the population. Determining the true prevalence of IPV is complex. In the most recent British Crime Survey (2010/2011) it was noted that 7.3 % of women and 5.0 % of men reported having experienced IPV in the previous year. This is equivalent to 1.2 million female victims and 800,000 male victims per year, although it has been acknowledged that even this figure is likely to be an underestimate of the true prevalence due to the degree of under-reporting that is common in IPV incidents (Office for National Statistics, 2012).

Two main schools of thought exist which propose various theories about the cause of IPV. One of the earliest, and most controversial theories, conceptualises IPV as a problem of men’s violence towards women, caused by societal rules and patriarchal beliefs that encourage male dominance (Dutton, 2006). According to this gendered perspective patriarchy is viewed as a direct cause of IPV, rather than one of multiple interacting factors (Dutton, 2006). However, this theory has been heavily criticised as not being based on sound empirical evidence. In

addition, the emphasis on male dominance and gender hierarchy, to the exclusion of other social and individual factors, fails to explain why some males aggress against women while others do not, even though all men are exposed to cultural messages that support male superiority (Dixon & Kevan, 2011; Heise, 1998). As Heise (1998) highlights, male dominance may be an aspect of a theory of violence, but research suggests that a single factor explanation is inadequate.

A second school of thought that has emerged alongside the gendered perspective is the ‘gender inclusive’ perspective. This perspective is an umbrella term that can be used to identify any theory that can be applied to understanding both men’s and women’s use of IPV and incorporates a variety of risk factors and theoretical standpoints (Dixon & Graham-Kevan, 2011). In addition, much like the child maltreatment literature, broader ecological theories that take into account the family as a whole and focus on the dynamic processes between each of the family members have more recently gained favour in the IPV literature. Browne (1998) presented a multifactor model of family violence which suggests that stress factors and background influences are mediated through the interpersonal relationships within the family. This model assumes that for families with insecure or anxious relationships, situational stressors may build up and result in a physical or emotional attack (Browne & Herbert, 1997).

Importantly, this theory does not conceptualise IPV as violence perpetrated exclusively by men towards women, but rather focuses on the relationships between family members as a whole. In accordance with this model, it has been suggested that interventions should be directed at strengthening family relationships rather than being aimed at an individual level. Such holistic approaches to the understanding of family violence are thought to be more promising for preventing, assessing and treating family violence in comparison to those that are aimed at solely working at an individual level (Dixon & Graham-Kevan, 2011). This is especially pertinent

considering the high frequency by which IPV and CM overlap in the family unit, which therefore requires a conjoined response to reduce these often inter-related problems (Edleson, 1999).

The Need to Consider the Co-occurrence of IPV and Child Maltreatment

It is integral that any theory explaining the aetiology of IPV considers the substantial overlap of IPV with other forms of violence. Prevalence rates for the number of children exposed to IPV (hearing or seeing violence and/or its consequences, or simply being aware of IPV in the home) have been difficult to determine due to discrepancies in research methodology, however, various documented rates highlight the magnitude of the problem. For example, in a British national prevalence study it was reported that 26% of 2,869 young men and women aged between 18-24 years had witnessed IPV at least once and 5% had witnessed frequent and ongoing IPV (Cawson, 2002). In terms of children who are exposed to both IPV and CM, determining the rates of this social issue are peppered with methodological difficulties (Appel & Holden, 1998), however, retrospective studies investigating male perpetrators of IPV typically cite rates of overlap between 30 – 60% (Appel & Holden, 1998; Edleson, 1999; Dixon et al., 2007).

The negative impact of exposure to IPV on children has been highlighted in the literature (Hillberg et al., 2011; Holt, Buckley, & Whelan, 2008). Exposure to IPV can have varying impacts at different stages of a child's life, with early and prolonged exposure potentially resulting in more severe problems for the child because it affects the subsequent chain of the child's development (Cunningham & Baker, 2004). At its most basic level, being exposed to IPV can be considered a form of emotional abuse for the child, with resulting negative implications for the child's emotional health, mental health and future relationships (Brandon & Lewis, 1996). Both observing intimate partner violence, or being directly maltreated can result in serious

negative consequences such as poor verbal development, violent behaviour, psychosomatic symptoms, post-traumatic stress disorder, depression, anxiety, poor self-esteem and low academic achievement (Lichter et al., 2004; Litrownik et al., 2003, Holt, Buckley, & Whelen, 2008). In addition, children exposed to the “double whammy” of both child maltreatment and IPV have been shown to suffer greater negative effects such as more distress and behaviour problems compared to children who only experience one form of family violence (Holt, Buckley, & Whelen, 2008; Hughes, Parkinson, & Vargo, 1989).

Exposure to violence within the family home has also been shown to increase the likelihood of that person aggressing against family members later in life (Dixon, Browne, & Hamilton-Giachritsis, 2005). Research has consistently shown support for the intergenerational transmission of violence, which suggests that violence can be learned within the family and passed on from one generation to the next (Egeland, Yates, Appleyard, & van Dulmen, 2002). This is illustrated by the finding that children who are victims of child maltreatment or who witness IPV are more likely to react to their children and partners in a violent way during adulthood (Egeland, Yates, Appleyard, & van Dulmen, 2002). The child victim of family violence, therefore develops a predisposition towards perpetrating violence towards their family as an adult and, therefore, there is a continued chain of violence that is passed from one generation to the next (Wallace & Roberson, 2010). Overall, the empirical evidence suggests that growing up in a home environment characterised by IPV can critically jeopardise the developmental progress of children, the cumulative effect of which may be carried into adulthood (Cunningham & Baker, 2004).

Ecological Models accounting for IPV and Child Maltreatment

Despite the more recent findings in the literature regarding the overlap in risk factors for IPV and CM, there are currently no theoretical frameworks that can be applied to explain the aetiology of both IPV and CM within one model. Research has suggested that families where both IPV and CM are present may share problems (such as life stressors, community violence and parental history of severe violence) that are similar in nature but greater in magnitude compared to families exhibiting only one of these forms of violence (Shipman, Rossman & West, 1999). Heise (1998) was one of the first to propose the adoption of an integrated, ecological framework to understand the origins of IPV based on the previously published ecological frameworks regarding the aetiology of CM. This framework conceptualises family violence as a multi-faceted phenomenon grounded amongst an interplay of personal, situational, and socio-cultural factors (Heise, 1998). Having identified this ecological framework as being useful in explaining the aetiology of both IPV and CM independently, this framework is also useful for conceptualising connections between IPV and CM. The ecological perspective conceptualises abuse as an interaction between parent and child in the context of both the family setting and the larger social system (Tajima, 2004), but since the parent-child system is nested within the spousal relationship, what happens in this relationship has implications for what happens between parents and their children (Belsky, 1980). Overall, identifying the factors which are inter-related and operate at different levels in an ecological model can assist us in understanding the context in which family violence takes place and will give us a better understanding of the various individual, family and environmental factors that influence the coercive behaviour of family members (Levesque, Clement & Chamberland, 2007).

Heise's (1998) framework consists of four levels of analysis, often represented as four concentric circles. The innermost circle consists of ontogenic factors. These represent the personal history factors that influence that individual's behaviour and relationships and refer to the features of an individual's developmental experience that shape his or her response to the other factors proposed in this framework (Heise, 1998). Research has indicated that experiences such as having witnessed violence between parents during childhood and experiencing physical or sexual abuse as a child are factors within the ontogenic level that have been found to be predictive of perpetrating future abuse (Heise, 1998).

The Microsystem or Situational factors refer to the second level of the model and consist of those interactions in which a person directly engages with others. This represents the immediate context in which abuse takes place, which for individuals who perpetrate IPV, is the family. It has been noted that a variety of microsystem factors have been shown to be related to the increased risk of violence within the family such as marital conflict and the use of alcohol (Heise, 1998).

The third level, or exosystem, encompasses the institutions and social structures, both formal and informal, that embed the microsystem (for example, work, social networks or neighborhood). It has been noted that exosystem influences are often the by-products of social changes. For example, some of the exosystem factors that have been linked to the perpetration of IPV are unemployment, isolation of the woman and family and anti-social peers (Heise, 1998).

The macrosystem represents the broad set of cultural values and beliefs that inform the other three layers of the ecological framework. These macrosystem factors operate through their influence on factors and structures lower down in the system (Heise, 1998). Research has also

stressed the importance of the mesosystem, an additional layer that represents the interplay between various aspects of a person's social environment. The mesosystem includes links between an individual's family and other factors such as peers or extended family. The mesosystem also includes links with social institutions such as police, courts and social services (Heise, 1998).

Heise's model has also been used as a helpful framework for understanding and conceptualising the interplay of risk factors for victimisation of IPV. Previously witnessing family of origin violence, alcohol use, psychopathology and perceived danger are some of the risk factors that have consistently been found to be related to IPV victimisation in the literature (Stith, Smith, Penn, Ward, & Tritt, 2004). More specifically, risk factors found to be related to IPV victimisation can be organised into multiple levels in accordance with Heise's model. The factors of income, age, education and employment are identified as exosystem risk factors, number of children and violence towards partner are identified as microsystem risk factors, and fear, depression and alcohol use are identified as ontogenic risk factors for IPV victimisation. The use of this framework aids understanding regarding the inter-related nature of these risk factors and the individual, family and societal context in which IPV victimisation takes place (Stith, Smith, Penn, Ward, & Tritt, 2004).

Importantly, just as the ecological framework is helpful to understanding IPV and CM individually, it is also useful as a means of conceptualising connections between IPV and CM. The ecological perspective conceptualises abuse as an interaction between the parent and child in the context of both the family setting and the larger social system. Since the parent-child system is nested within spousal relationship, what happens within this relationship has implication for what happens between the parent and child (Belsky, 1980). Overall, the ecological framework of

violence provides an approach that facilitates an understanding of much of the existing research and, importantly, can be applied either at the level of the individual, to develop a profile of those most at risk of abusing, or at the level of the community, to help understand why rates of abuse vary by situation and setting (Heise, 1998).

Risk Assessment

One of the benefits of having a comprehensive and integrated framework for understanding the risk factors for IPV and CM and the overlap between the two, is the creation of more accurate and reliable risk assessments. Risk assessment requires professionals to determine factors present in the individual and relationship that are likely to increase their risk of offending or re-offending towards their partner, or child, and therefore, it is important that professionals are aware of the research regarding characteristics associated with perpetration of IPV and CM in order for assessments to be thorough, robust and unbiased (Dixon & Graham-Kevan, 2011). Predicting dangerousness in cases of family violence is of interest to the legal system, victim services and healthcare and therefore, both clinical and actuarial tools for assessing risk are becoming increasingly popular (Roehl, O'Sullivan, Webster, & Campbell, 2005). Although actuarial tools for prediction of CM are not as well developed, a number of IPV risk assessment instruments have been developed that can be used in sentence planning, safety planning, treatment planning and evaluating post treatment risk (Dixon & Graham-Kevan, 2011). These tools have been modelled on other risk assessment instruments developed for other types of violent and sexual offending (Roehl et al., 2005). Currently the most widely used IPV risk assessment tools include the Spousal Assault Risk Assessment (SARA; Kropp et al., 2005), the Danger Assessment (Campbell, 1995), the Ontario Domestic Assault Risk Assessment (ODARA; Hilton et al., 2004) and the MOSIAC-20 (De Becker, 1997). Such tools allow

professionals to accurately and reliably determine risk of harm and ensure that professionals assess risk in an empirically guided and non-biased manner.

Despite the considerable amount of research indicating a significant overlap between IPV and child maltreatment there are currently no known risk assessment tools that integrate this literature by assessing risk of both forms of violence within the family. It would appear that services and researchers still have a tendency to treat the two forms violence as separate entities, rather than adopting a multi-disciplinary approach to address both forms (Dixon, Browne, Hamilton-Giachritsis & Ostapuik, 2010).

Thesis Aims

This thesis aims to further psychological understanding about IPV and CM and the overlap between the two forms of family violence, as well as highlight the implications of this for multi-agency practice. As part of this, risk factors for IPV and CM and concurrent violence will be reviewed, and risk assessments that focus on assessing the risk of each form of violence will be evaluated.

The thesis is comprised of five chapters. After this initial introductory chapter follows Chapter Two, which provides a systematic examination of the differences in risk profiles of families who experience IPV and CM concurrently or in isolation. This review also examines whether there are differences in the risk factors for male and female perpetrators of IPV and CM. As this thesis not only aims to further psychological understanding of both IPV and CM but also the risk assessment of both, Chapter Three provides a review of an IPV risk assessment tool and Chapter Four provides a empirical investigation of a CM risk assessment tool. Chapter Three focuses on a review of the risk factors for IPV by presenting a critique of the Danger Assessment

(Campbell, Webster & Glass, 2009) a tool widely used for assessing risk of intimate partner homicide. The Danger Assessment is a clinical and research instrument that was designed specifically to assess the danger of being a victim of an Intimate Partner Homicide (IPH). The review explores the development of the tool, reviews the empirical evidence regarding the reliability and validity of the tool, considers the strengths and limitations of the DA and its suitability for use in countries such as the U.K. Chapter Four moves to looking more closely at the assessment of risk of child maltreatment as a result of exposure to IPV. This chapter provides an empirical research study evaluating the Multi-agency Joint Screening Process currently used in the West Midlands which assesses the risk to children of living in a household where IPV is present. This study focuses on establishing how effective, reliable and valid the Multi-agency Domestic Violence Risk Identification Threshold Scales (MDVRITS) is in identifying the risk and needs of children who reside in a family where an incident of intimate partner violence has been reported to West Midlands Police. The thesis concludes with Chapter Five which provides a discussion of the work presented, drawing together the main findings and considers implications for future research and applied practice.

CHAPTER TWO

EXAMINING DIFFERENCES IN RISK PROFILES OF FAMILIES WHO EXPERIENCE INTIMATE PARTNER VIOLENCE AND CHILD MALTREATMENT CONCURRENTLY OR IN ISOLATION: A SYSTEMATIC LITERATURE REVIEW

Examining Differences in Risk Profiles of Families who Experience Intimate Partner Violence and Child Maltreatment concurrently or in Isolation: A Systematic Literature Review

Abstract

Aim: This systematic review aimed to identify quantitative empirical studies that examine differences in the risk factors of families who experience concurrent intimate partner violence (IPV) and child maltreatment (CM) compared to those who experience only one of these forms of family violence.

Method: A review of the literature was conducted in October 2013 to identify all relevant articles in four electronic databases using a systematic and documented search strategy. Literature identified through these searches was then screened using a pre-determined inclusion and exclusion criteria. All remaining relevant studies underwent data extraction and quality review and study results were synthesised.

Results: Nine studies were included in the review. Five perpetrator risk factors were consistently found to differentiate families with co-occurring IPV and CM from comparison groups, namely: increased perpetrator substance abuse, mental health difficulties, convictions for violence outside the family home, childhood victimisation and lower levels of perpetrator and victim education. Each of these factors was found to be associated with the presence of co-occurring abuse in the household in at least three of the nine studies reviewed. Differences in risk factors were also noted between perpetrators of concurrent abuse, CM-only and IPV-only violence. Gender differences were also noted for the risk factors associated with male and female perpetration of concurrent abuse.

Conclusions: Findings suggest that families with concurrent IPV and CM are not qualitatively

different from families in which isolated forms of family violence occur, but rather, families characterised by concurrent IPV and CM display more severe levels of risk factors related to victimisation, mental health issues and criminality than families with isolated forms of family violence. Implications for future research and practice are discussed.

Introduction

Violence within the family has long been recognised as a significant social problem. Straus and Gelles (1990) identified that people were at higher risk of assault by family members in comparison to people outside the family home and estimates reveal that family violence is the most widespread type of interpersonal violence experienced by women and young children (American Psychological Association, 1996).

Recently researchers and professionals have stressed the need to understand family violence from a holistic approach and recognise the contribution of family dynamics rather than understanding one form of abuse in isolation (Dixon, Hamilton-Giachritsis, Browne, & Ostapuk, 2007). Considerable attention has been paid to understanding issues related to the co-occurrence of IPV and CM in the empirical literature and estimated overlap rates of both forms of violence have been cited between 30-60% (Appel & Holden, 1998; Edelson, 1999; Slep & O'Leary, 2009).

These studies provide compelling evidence that CM and IPV often co-occur within the same families with damaging consequences for the child. Children living in a household where IPV is present are at increased risk of being the direct victims of separate incidents of maltreatment by the parents and/or becoming involved in the parental violence (Dixon, Hamilton-Giachritsis, Browne & Ostapuk, 2007) and the children have been found to demonstrate a higher degree of developmental behavioural and emotional dysregulation as a result (Chan, 2011). Considering the grave implications that concurrent forms of abuse can have for families and children, this review aims to understand and synthesise findings that have attempted to understand characteristics associated with these families in an effort to promote the risk assessment, treatment and prevention of this social issue.

Models of Co-Occurring Abuse

In their meta-analytical review Appel and Holden (1998) propose five theoretical frameworks for understanding the relations among family members living in a household where IPV and CM are present. These five models are divided into unidirectional and bidirectional models as follows and highlight the different forms that concurrent IPV and CM may take.

The first and simplest of the models of co-occurrence is referred to as the ‘single perpetrator’ model which depicts one parent as the sole source of the violence and both the spouse and child as the passive recipients of the abuse (Appel & Holden, 1998). The second unidirectional model is referred to as the ‘sequential partner’ model. In this model the victim of IPV is implicated as the perpetrator of the CM. This model reflects a case in which the victim of IPV responds to their victimisation by physically abusing the child. It is noted that in this model the child is not directly at risk from the perpetrator of the IPV, but rather, the child is the recipient of intentional or unintentional aggression from the victimised parent (Appel & Holden, 1998). Research has indicated that this violence may be transmitted through various mechanisms such as negative marital interactions “spilling over” into the parent child interactions, through learning that aggression in relationships is an effective means of control, or through being more prone to using punitive or harsh child-rearing practices as a result of living within a stressful family environment (Appel & Holden, 1998). The third uni-directional model is referred to as the ‘dual perpetrator’ model. In this model one parent is abusive to the partner and the child and, in addition, the mother also aggresses against the child. In this scenario it is argued that each of the mechanisms that may account for the child maltreatment in the previous models could be present in this model, however, another possible mechanism could be that the victimised parent engages

in harsh parenting to pre-empt the perpetrating partner's even harsher punishments (Appel & Holden, 1998).

Two bi-directional models are proposed and adopt a systematic orientation and highlight bi-directional abusive family patterns in which the child and victimised partner are not passive recipients of abuse, but rather, are part of a reciprocal pattern that contribute to violent behaviour (Appel and Holden, 1998). The 'marital violence' model reflects a marital relationship in which there is reciprocal abuse between the partners, and either one or both parents abuse the child. Appel and Holden (1998) highlight that the two distinguishing features of this model are the reciprocal marital violence that serves to maintain violence in the relationship and the absence of actions from the child that would elicit or provoke parental aggression. Finally, the 'family dysfunctional' model is characterised by a system of interactions in which the mutually violent parents and externalising child engage in violent interactions. In this model the child is not a passive recipient of abuse, but rather, an active participant who may elicit violence through misbehaviour, noncompliance, aggression or externalising problems which triggers parental abuse (Appel & Holden, 1998).

Theoretical approaches explaining family violence

In their review Appel and Holden (1998) presented multiple theoretical approaches used to account for the five models of co-occurring abuse. Multiple theories have informed the IPV and CM literature, including social, cognitive, developmental-ecological, personality disorder, behaviour genetics, and family systems theories, leading to hypotheses about aggressive individuals and family stress (Guedes & Mikton, 2013). For example, the social learning perspective is based on biological theories, and according to this model the process of learning is based on the notion that aggressive responses to environmental cues that are followed by a

desired outcome are more likely to be repeated in the future (Browne & Herbert, 1997). Therefore, according to Social Learning Theory, people learn violent behaviour from observing aggressive role models. For example, a perpetrator of IPV may model the abuse they observed in their parents' relationship and the harsh parenting styles they experienced as a child (Browne & Herbert, 1997). Appel and Holden (1998) also point out that social learning theory may explain why perpetrators' partners proceed to maltreat their children in the 'sequential partner' and 'dual perpetrator' models of family violence. That is the victim of IPV may learn to be physically aggressive towards the child through modelling the violence they observe and experience. In addition, the victim may also model the harsh parenting they observe their partner using (Appel & Holden, 1998).

The psychobiological perspective focuses on inherent personality characteristics, often psychopathological in nature. This theory concentrates on the assessment of biological variables and traits which underlie the tendency to be violent, such as hostility, aggressiveness, temperament, and anger expression (Browne & Herbert, 1997). The Ecological Theory, previously presented and discussed in the introduction of this thesis, continues to be the most widely used model of CM and importantly, this model is also helpful in understanding co-occurring family violence. In addition, theoretical approaches derived from Social Learning Theory and Psychobiological Theory also aid in understanding family violence and continue to gain support in the current literature.

Risk profiles of Families with Concurrent IPV and CM

Although the negative effects of concurrent IPV and CM are generally agreed upon (Chan, 2011; Litrownik et al., 2003; Holt, Buckley, & Whelen, 2008), what is less clear is whether families experiencing both types of violence have unique and specific characteristics

that differentiate them from families where only one form of family violence occurs in isolation.

The limited studies into the risk factors specific to co-occurring IPV and CM have identified risk factors across individual, family and environmental domains which offers support for the ecological framework of viewing concurrent violence as inter-related and operating collectively at different levels (Heise, 1998; Levesque, Clement, & Chamberland, 2007). Several family factors such as increased poverty, larger household size, higher numbers of family stressors and marital problems have been associated with concurrent IPV and CM (Chan, 2011; Coohey, 2004; Hartley, 2002; O'Keefe, 1995). Perpetrator-related risk factors for concurrent IPV and CM include parents' psychological characteristics, mental illness, loneliness, alcohol or drug abuse, unemployment, parenting skills, crime history, more criminal convictions, social isolation and fewer years of education (Chan, 2011; Coohey, 2004; Hartley, 2002; O'Keefe, 1995).

Currently, there continues to be contradictory findings in the literature about whether there are distinct risk factors that characterise families with co-occurring IPV and CM or if they simply differ in the severity of the same risk factors that apply to all perpetrators of family violence (Chan, 2011). Some research has suggested that families with both IPV and CM may share similar problems, for example, life stressors, neighbourhood violence, and parental history of severe punishment, but exhibit them to a greater extent, compared to families exhibiting only one form of family violence (Chan, 2011). Slep and O'Leary (2009) have suggested that future research should address profiles of risk across factors, and whether these profiles differ in terms of their severity, but not kind, or rather, that the groups have distinctly different patterns of risk relations.

When exploring the links between IPV and CM it is important to consider the role that both mothers and fathers play in the violent interaction (Dixon et al., 2007). Initial research into

risk factors for co-occurring abuse focused on men as the perpetrators of IPV and CM in isolation. As a result, more is currently known about the risk factors specific to these forms of perpetration by men. More recently, building on the consistent finding that rates of perpetration of partner violence tend to be equal for both men and women (e.g., Archer, 2000), studies have begun to more closely investigate the risk factors specific to women's perpetration of family violence, both as victims of IPV and perpetrators of CM (sequential partner) or perpetrators of both forms of aggression (single perpetrator).

Overall, the risk factors specific to the co-occurrence of IPV and CM are not well understood. It remains that the process of understanding the interplay of risk and protective factors associated with the co-occurrence of IPV and CM is still in the early stages (Guedes & Mikton, 2013). Appel and Holden (1998) noted that "if risk factors associated with co-occurrence can be identified, perhaps more effective intervention and prevention programs could be developed" (1998, p.579). Better understanding of the conditions under which individuals perpetrate only one form of family violence, compared with individuals who perpetrate both has clear theoretical and clinical implications (Slep & O'Leary, 2009). Knowing what the additional risks are might help identify an individual who is likely to aggress against both adults and children in the family, thus promoting early detection rates of other forms of family abuse as well as intervention pathways (Slep & O'Leary, 2009).

To date there have been no reviews of the literature relating to co-occurring family violence since Appel and Holden's meta-analysis in 1998 and Edleson's meta-analysis in 1999, and there have been no known reviews that specifically investigate the risk profiles of families who experience one or both forms of family aggression. Consequently, this systematic review aims to identify quantitative empirical studies that examine differences in the risk factors of

families who experience concurrent IPV and CM compared to those who experience only one of these forms of family violence. Specifically, this review will:

1. Examine qualitative differences in the risk factors of families who experience concurrent IPV and CM or one of these forms in isolation.
2. Examine whether differences in risk factors between concurrent and CM only and concurrent and IPV only families exist.
3. Examine the risk factors associated with male and female perpetrators of IPV and CM.

Search Strategy

Sources of Literature

A scoping exercise was conducted using the Cochrane Database of Systematic Reviews and the Campbell Collaboration Systematic Review Databases to identify whether existing reviews had addressed the aim of this manuscript. Reviews were found regarding CBT treatment strategies for parents who physically abuse their children. No reviews examining the risk profiles of families with co-occurring intimate partner violence and child maltreatment were found.

A comprehensive search was employed to identify all relevant articles for the current review. It was decided that this review would focus on studies published after the last meta-analysis in this area which was Edleson's (1999) meta-analysis.

The following electronic databases were searched between 1 January 1999 and 1 October 2013; PsychINFO (Psychological Abstracts) EMBASE (Ovid), Medline (R) (Ovid), Web of Science- With Conference Proceedings using set key words as follows:

intimate partner violen* or famil* aggress* or famil* violen* or domestic violen* or wom*

batter* or wife beat* or domestic abuse* or marital abuse* or spous* abuse or intimate violen*
or partner abuse or partner violen* or wife abuse or battered wom* or violen* relationship* or
marital physical abus* or marital* violen* famil* or intimate partner maltreatment

AND

child* abuse* and neglect or child* abuse or child* neglect or child* maltreat* or violen* against
child*

AND

concurren* or overlap or compar* or co-occur* or differentiat*

Reference Lists: Bibliography searches of key articles were also completed in an attempt to
identify any additional relevant studies.

Study Selection

Initial scoping searches of the databases and reviews of previous literature in this area assisted the formulation of specific inclusion and exclusion criteria. The following criteria were explicitly applied to all potential studies in order to assess eligibility for the present systematic review and to reduce potential reviewer bias. Every potential study underwent screening to decipher whether it should be included in the current review. Full texts were obtained for all studies that met the inclusion and exclusion criteria.

Population: Any adult, male or female perpetrator engaged in intimate partner violence and child maltreatment within the family environment.

Inclusion:

- Publication years between 1999-2013
- Quantitative Empirical studies

- Studies published in a peer-reviewed journal
- English language papers or translated into English
- Studies investigating specific risk factors for the co-occurrence of IPV and CM compared to risk profiles for CM or IPV alone
- Presence of a co-occurrence group and at least one comparison group

Exclusion:

- Studies investigating the prevalence of the co-occurrence of IPV and CM only
- Systematic or literature reviews, editorials, commentaries, unpublished doctoral dissertations
- Studies published before 1999

Data Collection

The total number of hits identified from the electronic databases was 2,560 (Figure 1). One further study was identified from a search of study bibliographies. A total of 2,541 failed to meet the inclusion criteria, and a further 10 were removed according to PICO, which resulted in 9 studies meeting the inclusion criteria for data extraction. All 9 studies were given a reference number for easy identification (Figure 1).

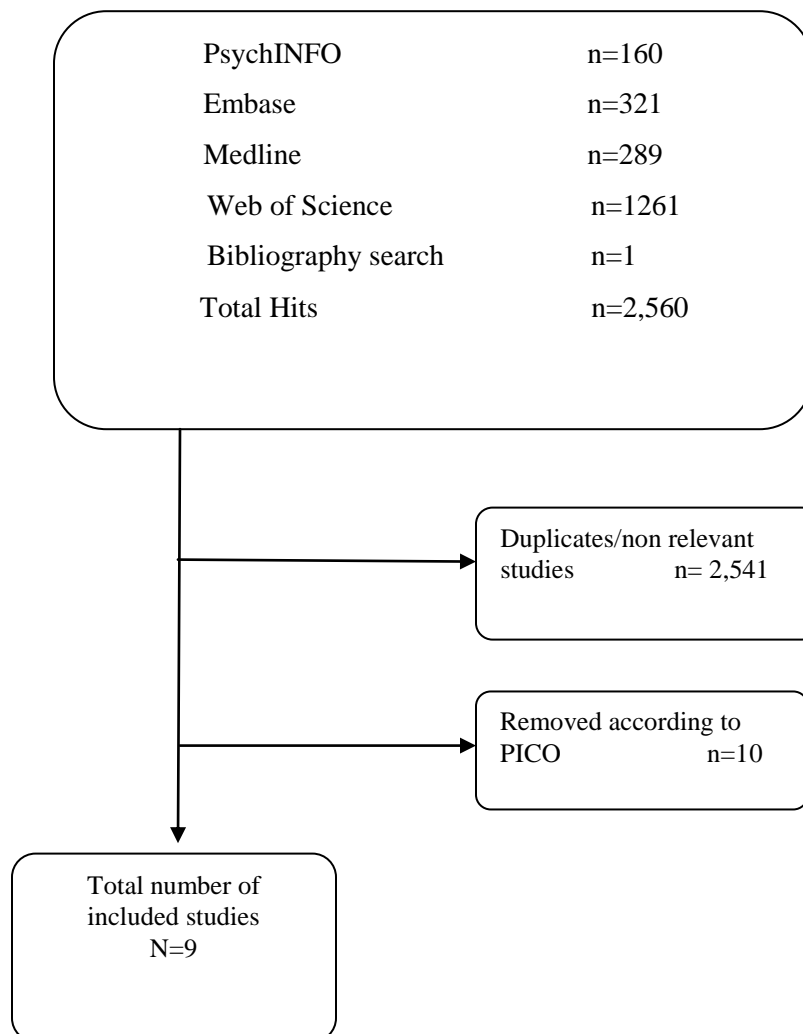


Figure 1. Diagram of data selection process

Quality Assessment

Following the sorting of studies according to the inclusion criteria, each included study was then quality assessed for methodological quality and significance of results using the quality assessment criteria form (see Appendices A and B). Cross-sectional and case control studies were quality assessed using different criteria relevant to the methodology employed. The key

variables assessed were study aims, design, sampling methods, appropriateness of measures used, bias reduction, statistical analyses, reliability, applicability of results, and discussion of limitations.

Each assessment item was measured on a 3-point scale: a score of two if item is present, one if the item is partially present, and zero if the item is not demonstrated in the study. Scores were summed to give a total quality assessment score ranging from 0 to 26. All studies were considered in the review regardless of quality due to the limited number of studies available; however, methodological quality is taken into account in the interpretation of study findings.

Quality assessment

The quality rating of studies ranged from 18-25 out of a possible total score of 26. To ensure reliability of the quality assessment scoring, five studies were randomly chosen to be scored by a second coder. Mean scores for the selected studies were not significantly different [$t(8) = .523, p = 0.80$] between the first and second coder ($M = 21.00, SD = 2.24, M = 20.20, SD = 2.59$ respectively). An intra-class correlation coefficient was computed with two-way mixed model and absolute agreement. The intra-class correlation indicated excellent reliability between raters (Chicchetti, 1994).

Data Extraction and Synthesis

Data was extracted for all included studies using a pre-defined data extraction form (Appendix C). This form allowed for both general and specific information to be collected and enabled a structured and unbiased approach to reporting all included studies. The data extraction form covers study objectives, population, comparison groups, data source, study design, criteria for coding the presence of IPV and CM, results, quality assessment score, author's conclusions and study strengths and weaknesses. In cases where information was not accessible within the

studies “unknown” was recorded on the extraction form.

Results

Table 1 depicts the details of the nine studies included in this review and their corresponding quality assessment scores and rankings. The data source identifies where the study sample was identified or recruited from and the sample size and comparison groups for each study are also outlined. A short overview and summary of the findings for each study in relation to the three research questions posed by this review is also provided in Table 1, Table 2 and Table 3. These results are discussed in more detail in the following Findings section.

Table 1.***Studies Included in the Review and Results of Research Question 1***

<i>ID No.</i>	<i>Title of Study</i>	<i>Authors and Date</i>	<i>Data Source</i>	<i>Study Method</i>	<i>Sample Size/ Comparison Groups</i>	<i>Perpetrator gender</i>	<i>Results Research Question 1</i>	<i>Quality Score (Rank)</i>
1	“Case Assessment and Service Receipt in Families Experiencing Both Child Maltreatment and Woman Battering”	Beeman, S.K., Hagemaster, A.K. & Edleson, J.L. (2001)	Police data	Retrospective	n=104 families (concurrent group) n=101 families (child maltreatment only group)	Examined households with female victims of IPV, but did not distinguish between the aggressor(s) of CM	Concurrent families more likely to have 1) unrelated male in the household (13.7% concurrent family, 6.5% CM only family) , (2) perpetrator substance abuse (21.4% concurrent perpetrator, 10.9% CM perpetrator)	20 (7)
2	“Battered Mothers Who Physically Abuse Their Children”	Coohey, C. (2004)	Parenting classes for mothers involved with Child Protection Services	Retrospective	N= 184 mothers: n=53 (concurrent group), n= 57 (no IPV or CM), n=33 (IPV only) and n=41 CM only)	Female victims of IPV who perpetrated CM	Concurrent mothers more likely to report: 1) mothers severely assaulted them as children (90% concurrent, 49% battered only), 2) poorer quality relationships with and received less support from their mothers 3) more stressors 4) known their partners for less time	21 (6)
3	“The Co-occurrence of Child and Intimate Partner Maltreatment in the Family: Characteristics of the Violent Perpetrators”	Dixon, L., Hamilton-Giachritsis, C., Browne, K & Ostapuik, E. (2007)	Forensic Psychology Consulting Service assessing suitability to parent following allegations of child maltreatment	Cross-sectional	N=162 parents. n=66 concurrent (43 fathers, 23 mothers) n=49 CM only (23 fathers and 26 mothers) n=25 IPV victim but perpetrator of CM (2 fathers and 23 mothers), n=22 non-abusive carer (7 fathers and 15 mothers)	Examined both male and female perpetrators and victims of IPV, and both male and female perpetrators of CM	1) Concurrent mothers had 1) higher prevalence for current relationship difficulties (94% concurrent, 23% CM-only) 2) more likely to reside with a violent adult (100% concurrent, 38% CM-only) Concurrent fathers more likely to 1) co-habit with violent partner (93% concurrent, 30% CM-only) 2) convictions for violent/sexual offence (62% concurrent, 17% CM-only) (3) more likely to physically and/or sexually abuse (56% concurrent, 22% CM-only) 4) higher prevalence of childhood abuse history (56% concurrent, 22% CM-only).	25 (1)
4	“Three Patterns of Domestic Violence in Households: Single Victimization, Repeat	Goodlin, W.E & Dunn, C.S. (2010)	National Crime Victimization Survey	Cross-sectional	N= 4,331 n=3,482 (single occurrence households), n=639	Examined family as a whole regardless of which parent was	Concurrent households more likely to 1) have higher number of people living in the household 2) have victims with less than a high school	18 (8)

	Victimization, and Co-occurring Victimization”		data (1992-2004)		(repeat victimisation), n=210 (concurrent household)	perpetrating IPV or CM	education.	
5	“The Co-occurrence of Child Maltreatment and Domestic Violence: Examining Both Neglect and Child Physical Abuse”	Hartley, C.C. (2002)	Iowa Department of Human Services referrals	Cross-sectional	N=441. n= 44 (concurrent IPV and child neglect) n=50 (child neglect only) n= 38 (concurrent IPV and child physical abuse) and n=38) child physical abuse only.	Examined households with female victims of IPV, but both female and male aggressor(s) of CM	Concurrent child neglect: 1) more single parent households (30% concurrent, 6% child neglect only) 2) fewer married parents (33% concurrent, 60% neglect-only) 3) fewer fathers biologically related to children (23% concurrent, 57% neglect only) 4) more mothers with a history of drug/alcohol problems (39% concurrent, 18% neglect only) 5) mental health problems (25% concurrent, 6% neglect only), more mother-only perpetrators (75% concurrent, 54% neglect only). Concurrent child physical abuse: fathers had more 1) drugs or alcohol use (18% concurrent, 4% child physical about only) 2) history of alcohol/ drug problems (34% concurrent, 15% physical abuse only), arrest/conviction for non-DV related offence (29% concurrent, 6% physical abuse only).	25 (1)
6	“Domestic violence and pathways into child welfare services: Findings from the National Survey of Child and Adolescent Well-Being”	Kohl, P.L., Edelson, J.L., English, D.J. & Barth, R.P. (2005)	National Survey of Child and Adolescent Well-being data (1999-2001)	Cross-sectional	N=3931 caregivers. n=559 co-occurrence group, n=772 CM and history of IPV, n=867 CM only, n=1733 had neither CM or IPV.	Examined family as a whole regardless of which parent was perpetrating IPV or CM	Higher levels of primary caregiver 1) substance abuse (31% concurrent, 8% CM-only) 2) mental health problems (25% concurrent, 11% CM-only) 3) history of arrests (25% concurrent, 8% CM-only).	21 (6)
7	“Factors Associated with Co-occurrence of Spousal and Parental Violence: Quebec Population Study”	Levesque, S., Clement, M. & Chamberland, C. (2007)	Family Violence in the Lives of Children Survey (2004)	Retrospective	N=3148. n=86 (IPV only), n=1,196 (CM only), n=372 (co-occurrence group)	Examined mothers who perpetrated CM but did not differentiate between whether mother was victim or perpetrator of IPV.	Higher perceived levels of parenting stress (2.8 concurrent, 3.3 CM-only) perceived social isolation (3.5 concurrent, 3.7 CM-only), more pervasive history of violence in mother’s childhood (85% concurrent, 74% IPV-only), lower levels of education (47% concurrent, 37% CM-only), less harmonious marital relationship (69% concurrent, 80% CM-only), worse economic situation	25 (1)

							(85% concurrent, 91% CM-only).	
8	“Distinguishing Risk Profiles Among Parent-Only, Partner-Only and Dually Perpetrating Physical Aggressors”	Smith Slep, A.M & O’Leary S.G (2009)	Telephone contact using random digit dialling procedure	Retrospective	N=453 couples. n=388 (non-aggressors) n=94 (CM only men), n=76 (CM only women), n=72 (IPV only men), n=98 (IPV only women, n=75 (co-occurrence men), n=103 (co-occurrence women).	Examined both male and female perpetrators and victims of IPV, and both male and female perpetrators of CM	Dual aggressors high on both parent and partner role specific risk and role-independent risk, especially men, and elevations on risk factors of all kinds compared to other groups.	24 (4)
9	“Correlates of the Co-Occurrence of Wife Abuse and Child Abuse Among a Representative Sample”	Tajima, E.A. (2004)	National Family Violence Survey (1985)	Retrospective	N=2733. N=37 wife abuse and CM, n=80 CM but no wife abuse, n=414 wife abuse but no CM	Examined households with female victims of IPV, but did not distinguish between the aggressor(s) of CM	Co-occurrence group has less education (65% concurrent, 86% IPV-only, 84% CM-only) 2) higher mother and father depression scores (1.2 concurrent, .7 CM-only, .8 IPV-only) 3) less likely to be in good health (43% concurrent, 38 CM-only) 4) husband used drugs more frequently (19% concurrent, .5 CM-only).	22 (5)

Descriptive Data Synthesis

Study populations.

The numbers of participants in each study varied from 105 families (Dixon et al., 2007) to 4,331 (Goodlin & Dunn, 2010). Much of the variation was due to study methodology, with cross-sectional studies using survey data accounting for the largest sample sizes (mean sample size for studies using survey data= 2,506). The total number of participants included in this review is 15,426 and the overall mean sample size of included studies is 1,725 families.

Of the nine studies in this review, seven were conducted in the United States, one in Canada, and one in the United Kingdom; consequently, there is a clear emphasis on North American populations in this review.

Five studies were conducted using survey data that had previously been collected for another purpose or for previous studies. Beeman et al. (2001) used police data to identify families where incidents of IPV and CM had been reported to the police. Coohy (2004) recruited cases from parenting classes for mothers involved with Child Protection Services. Dixon et al. (2007) used psychological reports for families from a forensic psychology consulting service conducting suitability to parent assessments following allegations of child maltreatment. Hartley (2002) used data from Iowa Department of Human Service referrals to identify confirmed child maltreatment cases and reports.

There was also significant variation between the perpetrators of violence investigated in these studies. Coohy (2004) examined female victims of IPV who perpetrated CM, while Tajima (2004) and Beeman et al. (2001) examined households with female victims of IPV, but did not distinguish between the aggressors of CM. On the other hand, Levesque, Clement and Chamberland (2007) examined mothers who perpetrated CM, but did not distinguish between

whether she was the victim or perpetrator of IPV. Dixon et al. (2007) and Slep and O’Leary (2009) examined both male and female perpetrators and victims of IPV, and both male and female perpetrators of CM. The other studies looked at the family as a whole regardless of which parent was perpetrating IPV or CM (Goodlin & Dunn, 2010; Hartley, 2002; Kohl et al., 2005).

All studies included in this review used comparison groups in their analyses but there was a wide variation between the types of comparison groups used. Beeman et al. (2001) compared a co-occurrence group with a child maltreatment only group. Tajima (2004) and Levesque (2007) compared a co-occurrence group with an IPV only, and a CM only group, while Coohy (2004) utilised a similar design but added an additional control group to her study. Goodlin and Dunn (2010) compared households with a single occurrence of IPV, repeat occurrences of IPV, and concurrent IPV and CM. On the other hand, Kohl et al. (2005) compared a concurrent group with a CM only group, and a group who reported a history of IPV in the household but did not report the presence of current IPV.

A differentiation was made between child abuse and child neglect in Hartley’s (2002) study which compared four different groups: a concurrent IPV and child neglect group, a child neglect only group, a concurrent IPV and child physical abuse group, and a child physical abuse only group. Dixon et al. (2007) also investigated CM more closely by categorising physical and sexual abuse in an “active abuse” category and neglect cases into a “passive abuse” category. Slep and O’Leary (2009) and Dixon et al. (2007) also examined gender effects. Slep and O’Leary (2009) compared groups of non-aggressive men, non-aggressive women, CM-only men, CM-only women, IPV-only men, IPV-only women, co-occurrence men and co-occurrence women. Dixon et al. (2007) also examined group differences between male and female groups by comparing a co-occurrence group, a CM-only group, victims of IPV who perpetrate CM group,

and a group who do not maltreat, but live with an individual who does.

Sampling methods also differed between the nine included studies. Five studies utilised a form of random or probability sampling, while four studies did not utilise randomised sampling procedures.

Criteria for coding the presence of intimate partner violence

Different studies used widely different criteria to code the presence of intimate partner violence in the household. Beeman et al. (2001) used the presence of confirmed police reports of IPV incidents to determine whether IPV was occurring in the household while Tajima (2004) used the criteria of any psychological, sexual or physical abuse having occurred in the preceding year to code for the presence of IPV. More specifically, Tajima (2004) used the following list of abuse to code for the presence of IPV: threatening to hit or throw something at, throwing something at, pushing, grabbing or shoving, slapping, kicking, biting or hitting with a fist, hitting or trying to hit with an object, beating up, choking, threatening with a knife or gun, using a knife or firing a gun and forced sex or attempted forced sex.

On the other hand, Hartley (2002) used a more specific and narrow method of coding IPV by only looking at physical abuse and only coding IPV as present if there was a clear indication from any child protection interview reports that the father was hitting the mother. Levesque et al. (2007) assigned women to the victims of IPV group if physical violence or psychological abuse had occurred at any point in the preceding 12 months. The authors created a dichotomisation based on the occurrence or non-occurrence of spousal violence. Women who identified the presence of a violent behaviour, either as a victim or perpetrator, having happened rarely, often, or very often during the preceding 12 months were given a score of 1, representing the presence of IPV.

Intimate partner violence was deemed to be present in Dixon et al.'s (2007) study if there was physical abuse between two individuals who demonstrated a level of romantic/intimate attachment and/or were married, cohabiting or living separately. Dixon et al. (2007) also provided a detailed coding dictionary within the write-up which outlined the conditions under which IPV was coded as present or absent. In cases where partners suffered multiple forms of abuse or neglect, the most active form of abuse was used to define abuse type. On the other hand, Cooley (2004) investigated severe physical violence by using any confirmatory responses to any of the severe assault items on the Husband-to-Wife subscale from the Conflict Tactics Scale to place women in the IPV victim category. Kohl et al. (2005) deemed IPV was present in families where the presence of active IPV in the family home was reported during their child welfare worker interview. Finally, Slep and O'Leary (2009) did not provide enough information to decipher the criteria that was used to code for the presence of IPV in the households examined in their study.

Goodlin and Dunn (2010) used a different methodology from all the other studies. They investigated physical or sexual IPV by using the criteria of the reporting of a violent victimisation (rape, assault, robbery, aggravated assault, simple assault) between partners, or parent to child, from 1992 to 2004 to code for the presence of IPV and CM. However, they made no distinction between the presence of CM, IPV, or sibling to sibling violence, but rather coded families as a co-occurrence group if any combination of the three forms of abuse were reported during the preceding twelve years.

Most studies relied on some form of self-report regarding the presence of IPV in the household except for Beeman et al. (2001) and Goodlin and Dunn (2010) who used police data to confirm the presence of IPV in the household.

Criteria for assessing presence of child maltreatment

Similar to the criteria for the presence of IPV, there were varying criteria set out for coding for the presence of child maltreatment in households. Coohey (2004) specifically investigated child physical abuse by using Child Protection records of confirmed cases to code for the presence of child physical abuse perpetrated by mothers. Mothers who engaged in child neglect only were excluded from Coohey's (2004) study.

Kohl et al. (2005) used a similar criteria using the presence of an official investigation of child maltreatment by Child Protection Services to determine the child maltreatment group in their study, while Dixon et al. (2007) investigated any form of CM by including in their study families who had had allegations of child maltreatment made against them as a criteria to code for the presence of CM. Dixon et al. (2007) further detailed that cases of physical and sexual child abuse were concatenated into one active category of "physical and/or sexual child abuse" and cases of neglect were classified as "passive child neglect" and provided detailed information and definitions in a coding dictionary. Hartley (2002) also used official records by requiring that all cases in the child maltreatment and co-occurrence conditions were confirmed cases from the Iowa Department of Human Services. Hartley (2002) used three different sources of information to identify the presence of child maltreatment: the assessment of narratives completed by child protection assessment workers investigating the child abuse allegation, the service authorisation forms completed by Child Protection Service workers on families referred for services after an initial investigation, and a database kept by the Cedar Rapids Police Department on all IPV reports or arrests occurring in the city from January 1996 through July 1999. Beeman et al. (2001) and Slep and O'Leary (2009) did not provide enough information in their write-ups to decipher how participants were allocated to child maltreatment groups.

Tajima (2004) examined physical child abuse and used results from items from the Conflicts Tactics Scale (CTS) to code for the presence of physical child abuse in families. In this study Tajima (2004) operationally defined physical child abuse as any of the following incidents having taken place in the household in the preceding year: throwing something at the child, kicking, biting or hitting with a fist, beating up, burning or scalding, threatening with a knife or gun, or using a knife or gun against the child. Levesque et al. (2007) utilised a specific criteria to investigate whether psychological or physical child abuse was present. The authors used three specific variables to determine whether parental violence against children had occurred within the 12 months preceding the survey: psychological aggression (three times or more), minor physical assault, or severe physical assault. Women who answered “yes” to one or more of these variables were placed in the parental violence group.

Overall, four studies used official records or official reports of allegations to child protections services, one study used a validated assessment to determine the presence of CM in the household (Conflicts Tactics Scale; Tajima, 2004), while all other studies utilised self-report measures in interviews or surveys to code for the presence of child maltreatment in the family home.

Assessments

Few studies used validated assessment measures in their studies to either formally assess the presence of CM or IPV or as means of determining potential risk factors. Coohy (2004) utilised the Severe Assaults Scale (adapted from Stressful Life Events Scale) and Conflict Tactics Scales (CTS) while Dixon et al. (2007) utilised the Millon Clinical Multiaxial Inventory (MCMI-III), Parenting Stress Index (PSI), and the Index of Need scales. Levesque et al. (2007) utilised the Adult-Adolescent Parenting Inventory, Parenting Stress Index, Parent-Child

Conflicts Tactics Scales, Social Provision Scale, and EV99 (Enquete sure la violence familial dans la vie des enfants) (1999) in their study.

Slep and O’Leary (2009) used a number of validated assessment tools in their study including the Conflict Tactics Scale-II, Parent-Child Conflict Tactics Scale, Perceived Stress Scale, Childhood History of Aggression scale, State-Trait Anger Expression Inventory, Beck Depression Inventory- II, Family of Origin Aggression (modified version), Hyperactive-Impulsive subscale of the Adult Attention Deficit Disorders Evaluation Scales, Interpersonal Support Evaluation List, Negative Life Events (adapted from the Life Experiences Survey), Dyadic Adjustment Scale, Power Imbalance Scale, Dominance-Jealousy Scale (based on Psychological Maltreatment of Women Scale), Partner Cognition Scale, Physiological Reactivity, Attitudes Approving of Parent Aggression (adapted from Acceptance of Violence Questionnaire), Parenting Satisfaction Scale, and the Child Responsibility Attributions (adapted from Parent Cognitions Scale). The five other studies in the current review relied on survey or interview data that was not collected using any validated assessment measures.

Findings

Research Question 1: Investigate the difference in risk factors between co-occurrence and CM or IPV only families

A review of the nine studies indicated that there were common themes of risk that differentiated the perpetrators who engaged in co-occurring family violence from perpetrators who engaged in only one form of family violence. Several studies identified similar risk factors, for example, all four studies that investigated the risk factor of perpetrator substance abuse found that co-occurrence families recorded more perpetrator substance abuse compared to other groups (Beeman et al., 2001; Dixon et al., 2007; Hartley, 2002; Tajima, 2004). Dixon et al. (2007) investigated this association further and found that this finding was only noted in co-occurrence perpetrating males and not females in their sample. In addition, Hartley (2002) noted that in her sample it was only co-occurrence fathers who physically abused their child, rather than neglected them, that were more likely to experience substance abuse issues. Due to the finding that perpetrator substance abuse was found to be a risk factor for co-occurring family violence perpetrators in all the studies that investigated this risk factor, and that two of these studies scored the highest quality assessment scores, this would suggest that substance abuse is a reliable and consistent risk factor for perpetrating co-occurring family violence.

Mental health difficulties were another factor that consistently differentiated the co-occurrence families from families where IPV or CM-only are present in this review (Dixon et al., 2007; Hartley, 2002; Slep & O'Leary, 2009; Tajima, 2004). Of the four studies that investigated the mental health of perpetrators it was found that co-occurrence perpetrators reported experiencing a significantly higher prevalence of mental health difficulties (Dixon et al., 2007;

Hartley, 2002) and a higher severity of mental health problems (Slep & O’Leary, 2009; Tajima, 2004) compared to the IPV or CM-only groups. Dixon et al. (2007) reported that both co-occurrence mothers and fathers demonstrated significantly higher prevalence of mental health problems compared to IPV and CM only groups and this study also reported significant findings relating to severity of mental health issues with co-occurrence mothers being more likely to have been diagnosed with a severe clinical syndrome. When comparing the incidents of mental health difficulties between co-occurrence mothers and fathers, Dixon et al. (2007) also noted that it was the co-occurrence mothers who were four times more likely to have been diagnosed with a severe clinical syndrome. Again, it is worth noting that two of the studies indicating the relationship between mental health and perpetrating co-occurring violence were established to have the highest quality assessment scores.

In regards to perpetrator aggression and use of violence, all three studies that investigated this risk factor indicated similar findings. Hartley (2002), Dixon et al. (2007) and Slep and O’Leary (2009) all found that perpetrators of co-occurring family violence scored more highly on assessments of aggression or had more convictions for non-domestic violence compared to perpetrators of IPV or CM-alone. Dixon et al. (2007) reported that co-occurrence fathers were found to have more antisocial characteristics, had more factors significantly associated with the development of a criminogenic lifestyle and were three times as likely to have convictions for violent or sexual offences. Hartley (2002) investigated this relationship even further and found that co-occurrence fathers who perpetrated child physical abuse were more likely to have been arrested or have convictions for non-domestic violence-related offences; however, this finding was not significant for co-occurrence mothers or co-occurrence fathers who perpetrated concurrent IPV and child neglect.

An association between co-occurring family violence and lower levels of education was also noted in all three studies that investigated this factor. Levesque (2007) and Tajima (2004) both reported that perpetrators of co-occurring family violence were found to have lower levels of education. In addition to this, Goodlin and Dunn (2010) noted that the adult victim of co-occurring abuse was also noted to have lower levels of education according to their findings.

It would also appear that childhood experiences, or more specifically, being the victim of violence during childhood was noted to be a relevant risk factors for both men and women who perpetrated co-occurring IPV and CM. Levesque (2007) noted that experiencing violence in childhood differentiated perpetrators of co-occurring violence compared to perpetrating CM or IPV-only. This finding was replicated across genders with Coohey (2004) noting that women who were severely assaulted by their own mother were more likely to perpetrate co-occurring family violence in adulthood. Dixon et al. (2007) did not replicate this finding for women, but did find report that fathers who had experienced childhood abuse were more likely to perpetrate co-occurring family violence later in life according to their sample.

Hartley (2002) and Beeman et al. (2001) were the only two studies in this review to investigate the risk factor of having an unrelated male present in the household and both studies found that co-occurrence households were more likely to have an unrelated male present in the household.

There were mixed findings across studies regarding whether perpetrators of co-occurring abuse report experiencing more stressors than perpetrators of CM and IPV only. Overall, there were four studies in this review that investigated this risk factor. Two studies found no difference between the reported stress of males and females who perpetrate co-occurring abuse (Dixon et al., 2007; Tajima, 2004) however, two studies indicated that there were significant differences

between the reported stress of mothers who perpetrate co-occurring abuse (Coohey, 2004; Levesque, 2007). There was generally no difference in the overall quality assessment scores between the studies that found an association between co-occurring violence and increased perpetrator stress and the studies that found no significant difference between groups for this risk factor.

Other risk factors noted in the studies suggested that co-occurrence perpetrators were more likely to have poorer quality relationships, have known their partners for less time, have a greater number of people living in the household, worse economic situations, poorer physical health and were more likely to live in single parent households (Coohey, 2004; Dixon et al., 2007; Goodlin & Dunn, 2010; Levesque, 2007; Tajima, 2004). However, these factors were not consistently investigated, or the finding was not replicated in the other studies in this review, therefore, without further research little can be concluded from these findings alone.

Research Question 2: Examine whether differences in risk factors between concurrent and CM only and concurrent and IPV only families exist.

Comparison of concurrent and CM-only risk factors

A review of the studies indicated there were five studies that specifically investigated whether there were differences in risk factors between concurrent and CM-only families. These studies individually investigated a wide range of risk factors such as the quality of the marital relationship, education level and social support, however, very few studies investigated the same risk factors, which makes the identification of overall themes across studies difficult.

The most consistent findings across the five studies related to perpetrator alcohol and substance use and levels of parenting stress. The prevalence of perpetrator alcohol and substance misuse was found to be significantly higher in individuals perpetrating concurrent violence compared to CM-only families in all three of the studies that investigated this risk factor (Beeman, Hagemester & Edleson, 2001; Dixon et al., 2007; Tajima, 2004). However, Dixon et al. (2007) noted that this finding was only significant for male perpetrators of concurrent violence in their sample, not female perpetrators. In addition, all three of the studies investigating parenting stress reported that perpetrators of concurrent IPV and CM reported higher levels of parenting stress compared to CM-only perpetrators. Gender differences were noted regarding this finding, with Dixon et al. (2007) and Tajima (2004) reporting that this finding was only true for male perpetrators of concurrent abuse, while Levesque, Clement and Chamberland (2007) did not differentiate between perpetrator gender in their study.

Mental health issues were also found to be more severe in concurrently violent families compared to CM-only families in the two studies that investigated this risk factor (Dixon et al., 2007; Tajima, 2004). It was again noted by Dixon et al. (2007) that this finding was only significant in male perpetrators of concurrent violence. In addition, having experienced abuse or witnessed IPV as a child was significantly more likely for perperpetrators of concurrent violence compared to CM-only perpetrators in the two studies investigating this risk factor. Interestingly, whilst Levesque, Clement and Chamberland (2007) noted this finding in their sample of female perpetrators, Dixon et al. (2007) found this finding only held true for male perpetrators of concurrent violence in their sample. Quality of marital relationship was also explored as a risk factor for the perpetration of concurrent abuse in two studies in this review (Dixon et al., 2007; Levesque, Clement, & Chamberland, 2007). It was found that both male and female perpetrators

of concurrent IPV and CM reported higher levels of relationship difficulties with their partner in these studies compared to CM-only perpetrators.

Additional factors were also identified as being significantly different for the concurrent perpetrators compared to CM-only perpetrators including lower perceived social support, less education, male target of CM (Levesque, 2007) and poorer physical health (Tajima, 2004). Specific to male perpetrators of concurrent violence, Dixon et al. (2007) found that this group were more likely to have a criminal history for violent/sexual offences, convictions for non-violent offences and a history of juvenile delinquency, while female perpetrators of concurrent violence were more likely to live with a violent male compared to female perpetrators of CM-only. Unfortunately, these specific risk factors were not investigated consistently across the studies in this review, or the finding was not replicated in other studies which means themes across multiple studies cannot be drawn in relation to these risk factors.

Comparison of concurrent and IPV-only risk factors

Differences in the risk profiles of perpetrators of concurrent abuse versus IPV-only families were also investigated as part of this research question. Of the nine studies in the review, it was noted that only three studies conducted a comparison of risk factors between the perpetrators of concurrent and IPV-only abuse. Again, it was noted that very few of these studies investigated the same risk factors, making the identification of overall themes across studies difficult.

The only finding that was replicated across the two studies in which it was investigated was the education levels of the perpetrators of concurrent violence. More specifically, it was noted that perpetrators of concurrent abuse had lower levels of education compared to IPV-only perpetrators, and this finding was noted for male perpetrators (Levesque, Clement, &

Chamberland, 2007; Tajima, 2004) and female perpetrators of concurrent violence (Tajima, 2004).

Focussing on risk factors that were only investigated in one study, it was interesting to note that similar risk factors were found to differentiate concurrent and IPV-only families as was noted in the findings regarding risk factors for concurrent and CM-only families. For example, Tajima (2004) found that when compared to IPV-only perpetrators, concurrent perpetrators were more likely to score more highly on a depression index and have a higher incidence of drug use for male perpetrators, while Levesque, Clement and Chamberland (2007) noted that female perpetrators were more likely to report higher levels of parenting stress and poorer quality marital relationships compared to IPV-only female perpetrators. However, it is important to note that these factors were not investigated as consistently as they were in the studies comparing concurrent and CM-only perpetrators.

Table 2***Results of Research Question 2***

<i>ID No</i>	<i>Title of Study</i>	<i>Authors and Date</i>	<i>Results Research Question 2</i>
1	“Case Assessment and Service Receipt in Families Experiencing Both Child Maltreatment and Woman Battering”	Beeman, S.K., Hagemester, A.K. & Edleson, J.L. (2001)	1. Concurrent and CM-only-Concurrent perpetrators more likely to have 1) drug or alcohol misuse (21.4% concurrent perpetrator, 10.9% CM perpetrator) 2) at least one neglect allegation (65.5% concurrent, 51.3% CM-only) 3) involve mother’s male companion during most recent incident (7.6% concurrent, 4% CM-only)
2	“Battered Mothers Who Physically Abuse Their Children”	Coohey, C. (2004)	1. Concurrent and CM-only. Concurrent mothers more likely to 1) mothers severely assaulted them as children (90% concurrent, 49% battered only), 2) feel friends were critical and unreliable
3	“The Co-occurrence of Child and Intimate Partner Maltreatment in the Family: Characteristics of the Violent Perpetrators”	Dixon, L., Hamilton-Giachritsis, C., Browne, K & Ostapuk, E. (2007)	1. Concurrent and CM-only. Concurrent mothers: more relationship difficulties (94% concurrent, 24% CM-only). Concurrent fathers: more abuse history (56% concurrent, 22% CM-only), juvenile delinquency (56% concurrent, 26% CM-only), criminal history (77% concurrent, 39% CM-only), substance abuse (58% concurrent, 27% CM-only), Cluster B personality disorder (56% concurrent, 14% CM-only), relationship difficulties (94% concurrent, 19% CM-only) and violent/sexual convictions (62% concurrent, 17% CM-only).
4	“Three Patterns of Domestic Violence in Households: Single Victimization, Repeat Victimization, and Co-occurring Victimization”	Goodlin, W.E & Dunn, C.S. (2010)	Did not Investigate
5	“The Co-occurrence of Child Maltreatment and Domestic Violence: Examining Both Neglect and Child Physical Abuse”	Hartley, C.C. (2002)	Did not Investigate
6	“Domestic violence and pathways into child welfare services: Findings from the National Survey of Child and Adolescent Well-Being”	Kohl, P.L., Edelson, J.L., English, D.J. & Barth, R.P. (2005)	1. Concurrent and CM-only had higher levels of primary caregiver 1) substance abuse (31% concurrent, 8% CM-only) 2) mental health problems (25% concurrent, 11% CM-only) 3) history of arrests (25% concurrent, 8% CM-only).
7	“Factors Associated with Co-occurrence of Spousal and Parental Violence: Quebec Population Study”	Levesque, S., Clement, M. & Chamberland, C. (2007)	1. Concurrent and CM-only- Concurrent mothers more likely to have been 1) victim of parental violence as a child (85% concurrent, 74% IPV-only) 4) less harmonious relationship (69% concurrent, 97% CM-only) 5) weaker support network (3.5 concurrent, 3.6 CM-only), 6) less education (33% concurrent, 28% CM-only) 7) less social support (3.41 concurrent, 1.9 CM-only). 2. Concurrent and IPV-only. Concurrent mothers had 1) less education (33% concurrent, 21% IPV-only), 2) higher parenting stress (2.8 concurrent, 3.25 IPV-only), 3) less harmonious relationship (69% concurrent, 80% IPV-only), 4) less social support
8	“Distinguishing Risk Profiles Among Parent-Only, Partner-Only and Dually Perpetrating Physical Aggressors”	Smith Slep, A.M & O’Leary S.G (2009)	1. Concurrent and CM-only- Concurrent mother and father had 1) higher level of overall risk 2) more role-independent variable, 3) partner role specific variables and 4) parent role specific variables but did not report specific risk factors
9	“Correlates of the Co-Occurrence of Wife Abuse and Child Abuse Among a Representative Sample”	Tajima, E.A. (2004)	1. Concurrent and CM-only-Concurrent families had more 1) depression (1.2 concurrent, .7 CM-only), 2) male drug use (18.7 concurrent, .5 CM-only) 3) poorer physical health (43% concurrent, 64% CM-only) and 4) less husband education (65% concurrent, 84% CM-only). 2. Concurrent and IPV-only. Concurrent families had 1) more depression (1.2 concurrent, .8 IPV-only)

Research Question 3: Investigate the differences between male and female perpetrators of IPV and CM.

There were five studies that investigated gender differences in their sample. Beeman, Hagemeister and Edelson (2001) noted that male perpetrators of CM were significantly more likely to have had primary allegations of sexual and physical abuse made against them, whereas female perpetrators were more likely to have had primary allegations of neglect. More specifically, of the 54 male perpetrators in the sample, 53.7% had allegations of physical abuse linked to them, 24.1% sexual abuse, and 22.2% neglect. On the other hand, of the 106 women in the sample listed as the primary perpetrator of CM, 32.1% had allegations of physical abuse, 9.4% had alleged of sexual abuse, however, 58.5% were linked to allegations of some form of neglect, which included allegations of disregard for a child's safety or failure to protect (Beeman, Hagemeister, & Edelson, 2001). This finding was mirrored by Dixon et al.'s (2007) finding that males who perpetrated IPV and CM concurrently were more likely to engage in physical and/or sexual child maltreatment rather than neglect.

Interestingly, Dixon et al. (2007) also noted sex differences between mothers and fathers who perpetrated concurrent abuse, with fathers being significantly more likely to perpetrate co-occurring abuse compared to mothers. Moreover, fathers who perpetrated concurrent abuse demonstrated significantly more factors associated with an antisocial lifestyle and criminal behaviour while mothers who perpetrated concurrent abuse were noted to have a higher prevalence of factors associated with mental health problems and feelings of isolation compared to concurrent abuse fathers. In addition, Coohey (2004) reported that mothers who perpetrated concurrent abuse were more likely to rate their own mother as being critical and were more

likely to have been physically abused by their mothers during childhood compared to mothers who suffered IPV, but did not maltreat their child.

When comparing male and females in their sample, Slep and O'Leary (2009) noted that male perpetrators of concurrent violence were higher on risk factors relating to perceived stress, childhood history of aggression, anger expression, depressive symptoms, perceived social support and negative life events compared to female perpetrators of concurrent violence. Finally, Levesque et al. (2007) only investigated females' use of violence within the family in their study, but noted that women who perpetrated IPV and CM were less educated, reported the highest levels of parenting stress, and had more favourable attitudes towards the use of physical force for discipline compared to women who perpetrated IPV only or CM only.

Table 3***Results of Research Question 3***

<i>ID No.</i>	<i>Title of Study</i>	<i>Authors and Date</i>	<i>Results Research Question 3</i>
1	“Case Assessment and Service Receipt in Families Experiencing Both Child Maltreatment and Woman Battering”	Beeman, S.K., Hagemeister, A.K. & Edleson, J.L. (2001)	Male perpetrators of CM-only significantly more likely to have allegations of sexual/ physical abuse, females more likely to have primary allegation of neglect
2	“Battered Mothers Who Physically Abuse Their Children”	Coohey, C. (2004)	Concurrent mothers more likely to 1) rate own mother as critical 2) have been physically abuse by their mother during childhood (90% concurrent, 49% battered only).
3	“The Co-occurrence of Child and Intimate Partner Maltreatment in the Family: Characteristics of the Violent Perpetrators”	Dixon, L., Hamilton-Giachritsis, C., Browne, K & Ostapuk, E. (2007)	Concurrent mothers had 1) higher prevalence of factors associated with mental health problems (35% concurrent mother, 8% concurrent father) and 2) feelings of isolation (38% concurrent mother, 9% concurrent father) 3) involved past violent relationships (56% concurrent mothers, 25% concurrent fathers) Concurrent fathers were 1) more likely to have conviction for physical and/or sexual violence (62% concurrent father, 24% concurrent mother)
4	“Three Patterns of Domestic Violence in Households: Single Victimization, Repeat Victimization, and Co-occurring Victimization”	Goodlin, W.E & Dunn, C.S. (2010)	Did not investigate
5	“The Co-occurrence of Child Maltreatment and Domestic Violence: Examining Both Neglect and Child Physical Abuse”	Hartley, C.C. (2002)	. Did not investigate
6	“Domestic violence and pathways into child welfare services: Findings from the National Survey of Child and Adolescent Well-Being”	Kohl, P.L., Edelson, J.L., English, D.J. & Barth, R.P. (2005)	Did not investigate
7	“Factors Associated with Co-occurrence of Spousal and Parental Violence: Quebec Population Study”	Levesque, S., Clement, M. & Chamberland, C. (2007)	Concurrent females had 1) higher parenting stress, 2) more favourable attitudes toward use of physical force as a discipline technique and 3) less educated (37% concurrent mother, 47% concurrent father).
8	“Distinguishing Risk Profiles Among Parent-Only, Partner-Only and Dually Perpetrating Physical Aggressors”	Smith Slep, A.M & O’Leary S.G (2009)	Concurrent males were 1) more likely to have more perceived stress, 2) childhood history of aggression, 3) anger expression, 4) depressive symptoms, 5) perceived social support and 6) negative life events
9	“Correlates of the Co-Occurrence of Wife Abuse and Child Abuse Among a Representative Sample”	Tajima, E.A. (2004)	Did not investigate

Discussion

This review aimed to examine differences in the risk profiles for families where co-occurring intimate partner violence and child maltreatment are perpetrated compared to families in which there is only one form of family violence present. More specifically, this review identified differences in risk factors between concurrent abuse families and CM-only families, as well as concurrent and IPV-only families. An additional research question relating to the specific risk factors associated with male and female perpetrators of IPV and CM was also addressed. This review was, therefore, able to add to the growing amount of literature regarding the overlap of IPV and CM and, more specifically, the patterns of risk that may be uniquely associated with the perpetration of concurrent IPV and CM.

Nine studies were included in the current review. A wide variety of potential risk factors including perpetrator and family risk factors were assessed in the studies including perpetrator demographics, measures of family socio-economic status, perpetrator cognitions, personality profiles and history of perpetrator substance abuse. There were five perpetrator risk factors that were consistently found to differentiate co-occurrence perpetrators from the comparison group. These were increased perpetrator substance abuse, mental health difficulties, convictions for violence outside the family home, childhood victimisation and lower levels of perpetrator and victim education. This was investigated more closely by looking at whether these findings were replicated when looking at the specific differences in risk factors between concurrent violence and CM-only and concurrent violence and IPV-only perpetrators. Overall, it was found that perpetrators of concurrent abuse were more likely to have increased alcohol and substance misuse, parenting stress, mental health issues and poorer quality of partner relationships (Beeman, Hagemeister, & Edleson, 2001; Dixon et al., 2007; Levesque, Clement, &

Chamberland, 2007; Tajima, 2004). In addition, perpetrators of concurrent violence were more likely to have experienced abuse or witnessed IPV as a child compared to CM-only perpetrators (Dixon et al., 2007; Levesque, Clement, & Chamberland, 2007). In relation to the difference in risk factors between perpetrators of concurrent and IPV-only, all the aforementioned risk factors were found to be significantly higher in concurrent perpetrators in at least one study, however, only the factor relating to concurrent perpetrators' education levels was found to be consistently lower than the IPV-only perpetrators across two studies (Levesque, Clement, & Chamberland, 2007; Tajima, 2004).

Gender differences relating to risk factors were also noted. It was found that men who perpetrate concurrent violence had higher perceived stress, anger expression, depressive symptoms, negative life events, lower perceived social support and more factors associated with anti-social and criminal lifestyle compared to female perpetrators of concurrent abuse (Dixon et al., 2007; Levesque, Clement & Chamberland, 2007; Slep & O'Leary, 2009). On the other hand, females who perpetrated co-occurring abuse reported more feelings of isolation, more factors associated with mental health problems, higher levels of parenting stress, and more favourable attitudes towards corporal punishment (Coohey, 2004; Dixon et al., 2007; Levesque, Clement & Chamberland, 2007).

In terms of the debate regarding whether there are distinct risk factors that characterise co-occurring forms of violence, or if they simply differ in the severity of the same risk factors that apply to perpetrators of one form of family violence, the findings from this review indicate that families with co-occurring family violence share similar risk factors to those with isolated forms of violence. It would appear that the risk factors between the two sets of perpetrators are similar in nature, but are found to a greater extent in families with co-occurring violence. These

results mirror previous findings identifying parents' psychological characteristics, mental illness, loneliness, alcohol or drug abuse, crime history and fewer years of education as specific risk factors for family violence, however, these risk factors appear to be found in higher levels amongst individuals who perpetrate concurrent family violence. Overall, findings suggest that families with concurrent violence are not distinct or qualitatively different from families in which only IPV or only CM occur as they share many of the very same risk factors, it is rather that they simply differ in the severity of these risk factors (Chan, 2011; Cooney, 2004; Hartley, 2002; O'Keefe, 1995).

Limitations

In identifying relevant studies it was noted that, while there are at least two meta-analyses and an abundance of literature determining the prevalence of co-occurring IPV and CM in community samples, there are few studies that examined differences in the risk profiles between these families. Due to the very limited selection of relevant studies in this area the inclusion criteria was kept broad, and studies scoring lower scores on the quality assessment remained in the review. This resulted in a wide variation of methodologies between studies which made direct comparisons difficult and the general applicability of findings difficult to determine. With these limitations in mind, it is suggested that the results of the current review be interpreted with caution and be viewed primarily as an information gathering exercise.

Methodological problems are commonplace in this area of research. In the co-occurrence literature there are few available studies that include comparisons between co-occurrence groups, IPV-only and CM-only groups, which seems necessary for understanding whether a risk factor is unique to one form of violence (Slep & O'Leary, 2009). This review was able to overcome this limitation by identifying and including only studies that utilised comparison groups. Among the

limitations of this review, five of the included studies relied on previously collected data and aimed to correlate risk factors to each of the three groups. This methodology limits studies to the range of risk factors available to investigate, with the vast majority of these risk factors being those that appear in both the IPV and CM literatures (Slep & O’Leary, 2009). It has also been argued that this methodological approach is lacking in theory regarding which risk factors might be expected to distinguish among perpetrators, making it difficult to interpret the patterns of results found (Slep & O’Leary, 2009).

Many of the limitations identified in Appel and Holden’s (1998) meta-analysis unfortunately continue to hold true today. For example, Appel and Holden (1998) noted that there was little consensus in the literature regarding definitions of CM and IPV and how these are operationalised across studies. This was also noted in the current review, the studies analysed used a wide variation in the criteria of IPV and CM utilised in each of the studies. There did not appear to be much consistency from study to study between how IPV and CM were defined, coded or operationalised. Some studies explored both child abuse and neglect, while others only looked solely at physical abuse. Others still, deemed that any incident of family violence having taken place in the past qualified as present, while others were more specific about the frequency and occurrence of the abuse required in order for it to be coded as present. This limitation results in obvious concern about the ease and consistency of the comparison of results between studies.

In addition, in some studies, with the exception of Dixon et al. (2007), Hartley (2002), Tajima (2004) and Slep and O’Leary (2009), there was no distinction made between female and male perpetrators of co-occurrence violence. This highlights another considerable limitation, as it may well be the case that there are distinct risk factors for male perpetrators of concurrent violence compared to female perpetrators of concurrent family violence which is not detected

when the two genders are studied together. Overall, there is little consistency between the studies in terms of the form, severity, frequency, or comparison groups of family violence reported which makes overall patterns of risk difficult to decipher. Issues with many studies' reliance on self-report and the frequent use of non-random sampling in the studies may have also affected the current review's findings.

There are also methodological limitations related to this review that should also be addressed. Unpublished literature was not investigated in this review and one article was not accessed due to there being no English translation of it available.

Given the acknowledged limitations of the current review, and the infancy of the literature in the area of risk profiles in concurrent IPV and CM, this review seems better placed to highlight the need for future research in this area, and provide recommendations for future studies. In the future, more consistent classifications of IPV and CM groups among studies could result in more reliable and generalisable results. Although the exploratory studies in this review are an important foundation on which to build future research, studies that expand beyond the use of observational methods would provide more detailed information regarding causal links. These more methodologically sound studies can provide more detailed and specific information about the risk profiles of these individuals and determine whether there are any distinct risk factors for perpetrators of concurrent family violence or rather, as this early review suggests, they simply differ in the severity of the same risk factors that apply to many perpetrators of family violence (Chan, 2011).

Practical Implications

Overall, the results of this review have important practical implications for both research and practice. The wide range of risk factors associated with the co-occurrence of family violence

noted in this review including perpetrator personal characteristics, substance abuse, mental health and early life experiences highlight the particularly complex, chaotic and vulnerable characteristics of these specific families. These findings also indicate the need to view and intervene comprehensively in order to effectively address and reduce concurrent family violence. The reliable identification of risk factors associated with perpetrating concurrent family abuse is necessary in order to empirically inform the design of prevention and treatment programmes for men and women who perpetrate concurrent violence within the family (Dixon et al., 2007).

These findings also support Dixon and Graham-Kevan's (2011) view of the importance of adopting a holistic approach to understanding violence within the context of the family so as to better understand the aetiology and maintenance of violence within the family. Overall, a better understanding of the conditions under which individuals perpetrate both forms of family violence has important implications for increasing early detection rates by professionals providing support and services in this field, as well as informing more appropriate intervention pathways (Slep & O'Leary, 2009). Moreover, joint efforts between those working in child protection and those involved in reducing violence against women are needed to increase inter-agency collaboration and integrative treatment for the families. Dixon et al. (2007) highlight this ongoing partnership gap and highlight that the police are in a position to aid the prevention and intervention of child maltreatment by providing child protection professionals with information on the criminal background of a parent who has perpetrated IPV to help identify those that may be at high risk of perpetrating concurrent violence. In addition, there is a need for practitioners to be aware of the role of substance abuse, mental health concerns and early abuse have on increasing the risk of co-occurring family violence, as well as the risk factors unique to male and female perpetrators that increase their risk of perpetrating this violence within the family.

CHAPTER THREE

A CRITIQUE OF A PSYCHOMETRIC ASSESSMENT: THE DANGER ASSESSMENT REVISED

A Critique of a Psychometric Assessment: The Danger Assessment Revised

Abstract

Aim: This chapter aimed to provide a critique of the Danger Assessment (Campbell, Webster & Glass, 2009), a risk assessment tool used to assess the risk of Intimate Partner Homicide and IPV. More specifically, the validity and the reliability of the tool were explored and the suitability of the use of the DA in the UK was considered.

Method: This critique explored all available literature relating to the DA in order to provide an outline of the development of the tool, review the available empirical evidence regarding the reliability and validity of the tool as well as consider the strengths and limitations of the DA.

Results: The evidence generally indicated promising findings regarding the DA's validity and reliability, sensitivity, and specificity, however, the vast majority of available research had been conducted on the original DA (Campbell, 1986), and it was found that to date, there was little research that had investigated the revised DA (Campbell, Webster, & Glass, 2009) more closely.

Conclusions: Overall, it was found that the revised DA has the potential to be an extremely valuable IPH risk assessment tool in the U.K., however, before this can be considered a wider investigation into the tool itself is warranted as much of the research to date has been conducted by the author of the DA and focuses on the original DA and not the more recently published revised DA. In addition, validation of the tool for use internationally needs to be conducted before considering use of the tool in the UK.

Introduction

The Danger Assessment (DA; Campbell, 1986) was originally published in 1986, updated in 1995, and revised in 2009 and is used to assess the risk of male severe or lethal violence towards female partners. The assessment was developed to be used in a variety of multi-disciplinary settings working with Intimate Partner Violence (IPV) where professionals need to determine which cases require the most immediate attention and resources in order to prioritise cases (Campbell, Webster, & Glass, 2009).

Determining the seriousness of a particular case and the risk of escalation of violence is necessary for accurately and consistently allocating resources, as well as tailoring agency response to correspond to the level of dangerousness. There is also need for police, the courts, victim agencies and hospital emergency departments to have valid and systematic means of evaluating IPV cases and identifying those cases which are most likely to escalate to lethality (Roehl, O'Sullivan, Webster, & Campbell, 2005). Accurate risk tools are required to ensure service response is appropriate to level of risk posed as a way of avoiding unnecessary disruption in the lives of victims and their children as this may discourage them from accessing services in the future (Roehl et al., 2005). Moreover, there is the additional advantage of identifying any secondary victims, such as children, that may be impacted by the IPV. This is particularly relevant as the literature has consistently shown that exposure to IPV can result in longstanding negative effects for the child and that IPV is a significant risk factor for verbal and physical abuse and physical punishment of children (Chan, 2011; Herrenkohl, Sousa, Tajima, Herrenkohl, & Moylan, 2008). It is, therefore, crucial that these cases of IPV are identified before violence escalates so that adult victims are able to receive interventions that can increase their safety and improve their physical and psychological health (Campbell, 2002) and relevant safeguarding

procedures can be implemented where there are children living in the household.

Studies have found that women are likely to underestimate the threat of lethality or under report the severity of violence being perpetrated against them (Roehl et al., 2005). It is also believed that the process of risk assessment can help victims come to a more realistic appraisal of their level of danger in the relationship (Campbell, 1995). The DA was the first tool developed that focussed on the assessment of dangerousness related to lethal, near lethal, or potentially lethal outcomes for victims of IPV (Campbell et al., 2003). To date multiple risk assessments have been developed for use in the criminal justice system, but little has been done with victims (Hilton, Harris, & Rice, 2010). The DA helpfully summarises key risk factors collected by researchers in the field of IPV and collates this information into a checklist. Campbell (1995) describes the tool as a form of statistical prediction contrasted with clinical prediction, because it is based on prior research and has some preliminary evidence of reliability and validity. The items in the DA are based on consultation and content validity support from battered women, shelter staff, police, and other clinical experts in IPV (Campbell, 1995).

The DA assesses risk of extreme dangerousness and lethal violence for use with victim education and awareness, safety planning and service provision (Roehl et al., 2005). The DA was primarily designed to be used with victims for the purpose of prevention, while most other IPV tools were developed for use in the criminal justice system for sentencing, probation, bail, and treatment decisions with the offender as the primary respondent (Roehl et al., 2005).

As the revised version of the DA is an extension of the DA, the two are inextricably linked. Much research has been conducted with the original measure to date, and this critique will therefore provide an account that examines both measures. For clarity, the DA published in 1995 will be referred to as the “DA,” and the updated DA (2009) will be referred to as the

“revised DA” throughout this chapter.

Overview of the Original Danger Assessment (1995)

In contrast to many other instruments that focus solely on addressing risk of IPV re-assault, the DA is a clinical and research instrument that was designed specifically to assist victims of IPV assess the danger of being a victim of an Intimate Partner Homicide (IPH). The first part of the DA assesses the severity and frequency of battering by presenting the victim with a calendar of the past year (Campbell et al., 2009). The victim is asked to mark the approximate days over the past year when physical abuse incidents took place, and is asked to rank the severity of the incident on a scale of 1 to 5 (1= slapping, pushing, no injuries and/or lasting pain, 5 = use of a weapon, wounds from a weapon; Campbell, 1986). The calendar section was conceptualised as a way of raising awareness for the victim (Campbell, et al., 2009). It has been found that the use of this calendar increases the recall of the IPV victims in 38% of women (Campbell, 1986). Interestingly, it was noted that victims of IPV who initially reported no increase in severity and frequency of physical violence in the previous year altered their response to “yes” after filling out the calendar portion of the DA. Campbell (1986) believes this is due to the use of the calendar as a way of heightening victims’ awareness about their situations and reducing the normal minimisation of IPV (Campbell, 1986; Campbell et al., 2009). The focus of the assessment is intended to help battered women ascertain their own level of risk rather than provide absolute cut-off scores. Although the DA was originally developed to assess the risk of IPH, it has also been found useful in predicting risk for future IPV generally (Goodman, Dutton, & Bennett, 2000).

The second part of the DA consists of 15 items in a dichotomous “yes” or “no” response format of risk factors associated with IPH. Both portions (calendar and 15 items of the DA) take

approximately twenty minutes to complete and the victim can complete the DA by themselves, or with a professional who can assist with the interpretation of the assessment (Campbell et al., 2009). The DA is scored by counting the number of “yes” responses, with a higher number of “yes” responses indicating that more of the risk factors for IPH are present in the relationship. While there are certainly advantages of having a measure that is scored by simply summing the number of affirmative responses, for example, ease of scoring, this method also raises concerns about the transparency of the tool and the ease with which individuals could respond in a socially desirable way if they had concerns about the consequences of scoring highly on the tool.

It is important to note that, to date, all studies using the DA, except for the original study by Campbell (1986) address issues of risk with women as victims, and men as perpetrators. One of the strengths of the DA assessment is that it is one of the few lethality prediction assessments that is based on an IPH dataset, where other instruments are in large part derived from a generalised appreciation of common sense analysis of the research literature on IPV in general (Websdale, 2000). Another advantage of the DA is that it is short and simple to complete and requires information solely from the victim, which is a distinct advantage, as in many of the settings where IPV risk is assessed the victim is usually the only available source of information (Goodman, Dutton, & Bennett, 2000).

Overview of the Revised DA Assessment (2009)

The DA was revised in 2009 to include additional items that were predictive of IPH, to increase the clarity of the tool, and to incorporate weighted scoring for the tool (Campbell, Webster & Glass, 2009). The original DA and the revised DA are structurally the same, however, the revisions included the addition of four new items: abuser unemployment, the victim having a child in the home who is not the offspring of the abusive partner, stalking behaviour

exhibited by the abuser and the victim leaving the abuse after having lived together. These additional four items were all found to be significant predictors of attempted femicide in the validation study (Campbell, Webster, & Glass, 2009).

Some items were also re-worded in the revised DA; the item formerly worded “Is he violent toward your children?” was altered to read “Does he threaten to harm your children?” to reflect a greater strength as a risk factor and to avoid an automatic referral to child protective services when there is an affirmative response (Campbell, Webster, & Glass, 2009). “Double-barrelled” questions were also avoided in the revised DA, so one of the original items was divided into two separate items. In addition, the item regarding abuser violence outside the home was removed due to its lack of predictive salience. An item focussing on prior arrest of the abusive partner for IPV replaced this item because it was found to be significantly predictive of attempted femicide in the multivariate analysis (Campbell, 2009). There are now a total of 20 items on the revised DA.

In addition to the aforementioned changes, the adjusted odds ratios from the multivariate analyses of the femicide cases compared to the control group were used to identify a weighted scoring system that identifies four levels of danger (Campbell, Webster, & Glass, 2009). These four new levels of danger based on the total DA scores are: *variable danger* (score of 0-7), *increased danger* (score of 9-13), *severe danger* (score of 14 to 17) and *extreme danger* (score of 18 and above). The danger level names were chosen because there were found to have meaning for victims of IPV based on survivors’ and professionals’ interviews and to highlight that even at the lowest level (*variable danger*) the risk of lethal violence is not negligible and can change (Campbell, Webster, & Glass, 2009).

The weighted scoring system can only be accessed and utilised after the professional

completes a short training course and test on the revised DA. After completing this, the professional is considered certified in administering and interpreting the revised DA and is allowed access to the revised DA weighted scoring system and interpretation resources. For those not trained in the revised DA, the tool is still accessible for use as a checklist to identify an individual's risk factors associated with IPH. Overall, the revision of the DA in 2009 was found to increase the predictive accuracy of the tool.

Development of the Danger Assessment tool

The original DA (1986) was developed with consultation and construct validity support from battered women, law enforcement officials, shelter workers and researchers. The initial items on the instrument were developed from five retrospective studies identifying risk factors in cases where battered women were killed or seriously injured by their abusers (Campbell, 1995). An initial pilot study was completed with battered women in shelters which indicated that the process of completing the instrument and discussing it not only enhanced their awareness of danger, but also gave them additional information on which to inform their decisions about the future (Campbell, 1986). The wording of all items had previously been tested in shelter settings to ensure the items were easily understood and used terminology common to IPV victims (Campbell, 1986).

Although emphasis was placed on the findings of Campbell's (1986) study in particular, the findings from four other studies investigating IPV were also used to derive each of the 15 items of the original DA. In Campbell's (1986) initial study the items "abuser is sexually abusive," "abuser is intoxicated every day or almost every day," "abuser threatens to kill woman or she believes he is capable of killing her," "abuser controls all aspects of woman's life," "abuser is violently jealous," "woman was beaten while pregnant," and "woman is age 15-34

years” were all found to be present in the majority of battered women in the sample (Campbell, 1986). The variables of “increased frequency and severity of battering over the last year,” “gun is present in the house,” “batterer abuses drugs,” “abuser is violent outside of the home,” “woman has seriously threatened or attempted suicide,” “total family income is below poverty level,” and “minority group membership” were not recorded in Campbell’s (1986) study, however, the items were still included as items on the original DA, either because of strong additional research for the item, their inclusion enhanced the validity coefficients of the total instrument, or there was found to be ample variance for the item to be considered a useful indicator of risk (Campbell, 1986). The weighting for the item “victim threatened or tried to commit suicide” was not determined as studies of the DA have not specifically examined the risk faced by men of IPH when the woman is suicidal, however, the researchers felt that knowing whether a woman is suicidal is important for prevention efforts, therefore, it was decided that this item should remain in both the original and revised DA (Campbell et al., 2003). In addition, it was also decided that women’s view of their perception of risk should also be retained as an item in the original and revised DA even though it has been found that victims have a tendency to under-estimate their risk. This item was retained in the original and revised DA because the researchers felt that determining a woman’s perception of risk is important in developing safety plans and interventions (Campbell, Webster, & Glass, 2009).

In Campbell’s (1986) study the DA total scores for the sample ranged from 0 to 13 (87% of the 15 questions answered affirmatively). The mean score for the sample was 7 (46.6%) and the standard deviation was 3 (Campbell, 1986).

The original and revised DA are reviewed here in terms of its psychometric properties (such as reliability, validity, sensitivity and specificity), as well as its usefulness and empirical

foundations. To date much of the research investigating the reliability and validity of the DA have been completed on the original DA, and there is currently only one known research paper investigating the revised DA tool. For this reason the results of studies investigating the original DA are discussed in the following sections and, where possible, results from the study of the revised DA are also included and discussed.

Characteristics of a Good Test

Kline (1986) suggests a psychological test is good if the following characteristics are met: it is at least an interval scale, it is standardised, valid and reliable, discriminates between groups and has appropriate norms.

Normative Sample

The five studies used in the development of the original DA used samples from various settings with participants of various ethnicities. In Campbell's (1986) study a research sample was generated for the study through public advertisements in two U.S. cities as well as in womens' shelters in both cities (Campbell, 1986). The final sample in this study consisted of a total of 193 women, 96 non-abused and 97 abused. Twenty-four of the battered women were staying in one of the shelters at the time of interview (Campbell, 1986). Exclusions were made to the sample when some women did not complete the DA, and others were excluded due to being sexually abused, but not physically abused by their partner. The final total sample size for this study was 79 (Campbell, 1986).

The other four studies used in the development of the original DA included samples from a variety of settings including the community, shelters, emergency rooms, hospital inpatients, obstetrician and gynecologist doctors' offices and prenatal healthcare settings (Campbell, 1995).

Sample sizes ranged for each study from a sample size of 30 abused women to a total sample size of 164 women (Campbell, 1995). In terms of demographics, all studies included a substantial proportion of minority women (Campbell, 1995). Where sufficient sample sizes permitted, separate evaluations were conducted by ethnic group, for example, McFarlane and colleagues' (1992) study consisted of a sample evenly divided into European American, African American and Latino.

More recently Campbell, Webster and Glass' (2009) validation study for the revised DA consisted of a sample of 310 femicide cases, 194 attempted femicide cases and 414 abused controls. Femicide cases were identified from police or medical examiner records from between 1994 and 2000 in 11 cities across the United States. Cases were not randomly selected, but rather, selection was based on age requirements, the case being designated "closed" by the police, and a proxy informant who was knowledgeable about the victims' relationship being willing to participate in the study (Campbell, Webster, & Glass, 2009). Attempted femicide cases were identified through the offices of the district attorney, law enforcement, or the community domestic violence advocacy or trauma centres in each participating city. Finally, abused control cases were identified through the use of stratified random sampling of phone numbers to identify women who had experienced physical abuse or been threatened with a weapon by a current or ex-partner in the two years prior to the study. The demographics of the total sample was recorded as 33% white, 36% black/African-American, 22% Latina/Hispanic and 7% considered themselves another race or ethnicity.

The diverse set of samples used in the validation studies for the original DA and the revised DA enabled it to be developed with different populations across a variety of settings which allows for good generalisation to a variety of individuals. It is important to note however,

that all the studies used in the development of the original and revised DA consisted of samples with female victim and male perpetrator scenarios meaning that these findings cannot be generalised to men (Campbell, 1995). As a result, the accuracy of the DA in predicting homicide of male partners where the female is the abuser, or where the couples are mutually violent, remains undetermined.

Sensitivity and Specificity

Predictive instruments are often evaluated by their sensitivity and specificity. This is based on their ability to identify the largest proportion of true positives possible (sensitivity) while not including false positives. An instrument with high sensitivity casts the kind of wide net that is needed to ensure that there are few false negatives (victims who are deemed to be low risk but are re-assaulted) while high specificity insures that there are few false positives (few perpetrators who are falsely deemed high risk) (Roehl, O'Sullivan, Webster, & Campbell, 2005).

Revised DA

Using the data from Campbell, Webster and Glass' (2009) validation study for the revised DA it was found that cases of attempted femicide were much more likely to fall into the higher danger categories on the revised DA than were the abused controls. Sensitivity, or the proportion of women assaulted during follow-up who were correctly identified as high risk was 90% at the lowest level threshold of *variable danger*, with 86%, 83% and 57% at the next three increasing levels of danger (*increased*, *severe* and *extreme danger*) of the actual femicide cases. Specificity (abused controls) was found to be 69% at the *variable danger* level, and 70%, 80%, and 98% at the *increased*, *severe* and *extreme* levels of danger. This means that only 2% of the women abused but not killed scored in the *extreme level* of danger, 20% in the *severe danger*

range, 30% at *increased danger* and 31% at the *variable danger* level (Campbell, Webster, & Glass, 2009). These results suggest generally acceptable scores regarding the revised DA's sensitivity and specificity. Maintaining high positive predictive value and low negative predictive value is essential for a risk assessment tool such as the DA, particularly considering the seriousness of the outcome being assessed and the need to identify cases where intensive safeguarding intervention is warranted. Conversely, it is also extremely important to consider the ethical implications for the woman, her partner and the family of individuals who are incorrectly labelled high risk when this is not in fact the case.

In addition to this, Campbell and colleagues (2009) also investigated the sensitivity and specificity for the subset of cases in their sample that had previously interfaced with a criminal justice, healthcare, or victim's service agency as a result of IPV. The authors reported that specificity within the subset who were most likely to be screened for danger ranged from .370 if the *increased danger* level is used to designate high-risk status to .913 if the *extreme danger* level is the benchmark for high risk. Sensitivity of the revised DA danger levels among this subset was .981 for attempted femicides at the *increased danger* level (Campbell, Webster, & Glass, 2009).

Discriminates Between Groups

Concurrent predictive validity is a measure of an instrument's ability to successfully differentiate between groups. Campbell (1995) reported significant differences in DA mean scores among groups of women in her sample of 393 femicide cases, 183 attempted femicide cases and 426 abused controls. In terms of the DA's success in differentiating groups, this was supported by the different means in the seven groups of abused women used in the original DA validation studies. Campbell (1995) states that these findings accurately reflect the differing

degrees of severity of abuse one would expect to see in the different populations in that the lowest scores were noted in the non-abused sample, with the next lowest in the prenatal sample, a group not known to be abused or expected to be early in an abuse pattern. The highest scores were noted in the hospital emergency room group, a sample identified because of serious abuse related injuries. The second highest scores noted were from women in shelters who are likely to have come to a shelter due to fear of serious or fatal violence. The sample of battered women from the community had scores in the intermediary range (Campbell, 1995). This finding was replicated in a further two studies by Woods (2005) and McFarlane et al. (1998), where it was noted that the original DA discriminated between groups of abused and non-abused women in their studies.

Reliability and Validity

Assessing reliability and validity ensures the tool is measuring what it claims to measure, and that it will measure it consistently. A tool is said to be reliable if it is self-consistent and it yields the same score for each subject (given that subjects have not changed) on re-testing (Kline, 1998). When a tool is reliable, differences in an individual's score between administrations can be attributed to changes in the individual, rather than the tool. Research into the DA has attempted to demonstrate its reliability and validity in a number of ways.

Campbell (1995) has identified various difficulties that must be considered when assessing the reliability and validity of the DA. She points out that criterion related validity is impossible to determine in the concurrent sense, as there is currently no other known instrument that assesses the danger of homicide for battered women that validity statistics are available for. Another problem with assessing the validity of the DA is that predictive validity is difficult to accurately assess since conducting the assessment with the IPV victim is considered to be an

intervention in itself that may serve to prevent IPH in some cases (Campbell, 1986).

Test Retest Reliability

Kline (1986) highlights test-retest reliability as an essential attribute for any psychometric tool. Test-retest reliability requires that a test should yield the same score for a subject (given that they have not changed) on different occasions (Kline, 1986). There are a limited number of studies that have investigated the test-retest reliability for the original DA, however, in the two studies in which test retest reliability was assessed the scores ranged .89 to .94, which indicates excellent reliability (Campbell, 1995; Field, 2009).

Internal Reliability

Kline (1986) argues that a test is said to be reliable when it is self-consistent, that is to say that the items that reflect the same construct yield similar results. Campbell (1995) states that there is controversy about whether internal consistency reliability is an appropriate psychometric technique to use with risk assessment instruments wherein each item is considered to be an independent risk factor. Roehl et al. (2005) also suggest that internal consistency may not be an appropriate standard for risk assessment since the nature of a risk assessment is that it is intended to combine independent risk factors rather than measure a one-dimensional construct, and they aim for brevity, which both tend to lower alpha co-efficients. Assessment of internal reliability can be performed through correlations between the items using Cronbach's alpha.

Despite this, there are still many studies that have investigated the internal consistency reliability of the original DA and have reported their findings. Alpha co-efficients were calculated for Campbell's (1986) study as .71 which indicates acceptable consistency. In subsequent studies alpha co-efficients have ranged from .66 in a very small sample to .86 (Campbell, 1995) which can be interpreted as ranging from "questionable" to "good" reliability (Field, 2009). It is also

important to note that internal consistency reliability estimates did not vary for African-American, Latina or white women in the sample (Campbell et al., 1995).

Roehl et al. (2005) provided a summary of the reliability scores published in fifteen studies investigating the reliability of the original DA. These scores ranged from .60 to .86 in the studies reviewed which again ranges from “questionable” to “good” reliability (Field, 2009). Their own investigation of the internal consistency of the original DA found that it achieved respectable internal consistency overall, with a standardised alpha = .76 within most of the ethnic groups in their sample (Roehl et al., 2005).

In the 11 city femicide study using the revised DA, internal consistency ranged from .74 in the sample of 496 abused controls, to .75 in the sample of 183 attempted femicide victims and .80 in the sample of 263 actual femicide cases (Campbell, Webster, & Glass, 2009).

Discriminant Group Validity

Discriminant group validity tests whether concepts or measurements that are supposed to be unrelated are, in fact, unrelated (Kline, 2000). Discriminant group validity was supported by a significant ($p = .004$) difference of scores between the unweighted mean scores of cases (femicide victims = 7.4) and controls (abused women from the same cities = 3.2; Campbell, 1995). It was also noted that using weightings based on the multivariate risk factor analysis of the femicide cases resulted in a very good ROC analysis, with 86.6% of the actual femicide cases and 91.6% of the attempted femicide cases below the curve (Campbell, 1995).

Face Validity

A test is said to be face valid if it appears to measure what it purports to measure. Kline (1986) highlights that while face validity bears no relation to true validity it is important in so far as participants will not co-operate with assessments that lack face validity.

The original and revised DA were developed with consultation and construct validity support from battered women, law enforcement officials, shelter workers and researchers which helped to establish the content validity of the tool.

Convergent Construct Validity

Convergent construct validity measures the extent to which two similar constructs correspond with each other. Convergent construct validity of the DA was supported by the retrospective studies used in the validation of the original DA. These four studies recorded correlations with the DA and the Conflict Tactics Scale (Straus, 1979) of between .55 and .49 which indicates a moderate correlation (Campbell, 1995; Field, 2009). The DA and the Index of Spouse Abuse also showed moderate to strong correlations of .66 for the Index of Spouse Abuse –Physical scale and .44 Index of Spouse Abuse- Non-Physical scale (Campbell, 1995). Correlations for original DA scores and severity of worst injury incurred as a result of the abuse noted moderate values of .5 and .48 across two of the studies (Campbell, 1995; Field, 2009). Generally, convergent construct validity has been supported in the majority of studies, with moderate to strong correlations noted between the original DA and other validated assessments measuring severity and frequency of violence as well as with Post-Traumatic Stress Disorder (Woods, 2005).

Concurrent Validity

A test is said to possess concurrent validity if it can be shown to correlate highly with another test of the same variable which was administered at the same time (Kline, 2000). Limited research has been conducted into the concurrent validity of the DA, however, Roehl and colleagues (2005) reported evidence of concurrent validity for the original DA in terms of significant correlation ($r = .459$) with frequency and severity of physical abuse at baseline

measured by the Conflict Tactics Scale -2 (Straus, Hamby, Boney-McCoy & Sugarman, 1996).

Concurrent validity was also assessed in one of the retrospective studies used in the development of the original DA which evenly divided the sample into European American, African American and Latino women. Concurrent validity was supported in all three groups, with the Latina women reporting lower scores on all measures of abuse including the DA. A later study of similar design found concurrent validity was also equal across three ethnic groups (Campbell, 1995).

Predictive Validity

The predictive validity of a tool relates to how well the scores on the tool predict a future outcome, such as IPH. Due to the low base rate of IPH and the ethical necessity to intervene in obviously dangerous cases, it is impossible to predict IPH or risk of lethality with total certainty (Campbell, 1995). Practical and ethical considerations mean that it is not feasible to carry out longitudinal outcome research to determine the predictive accuracy of the original and revised DA because this would mean releasing high risk offenders into the community without intervention or supervision to determine whether they re-offend. Therefore, any predictive study in this field must attempt to control for level of supervision and access to treatment, among other variables (Dutton, 2006).

A study was conducted by Goodman, Dutton and Bennett (2000) to test the degree to which the original DA could be used to predict the likelihood of short-term repeat abuse by batterers within the criminal justice system. The original DA was found to be a stronger predictor of re-abuse after 3 months compared to the Conflict Tactics Scale –II (Straus, Hamby, Boney-McCoy & Sugarman, 1996). It was noted that an increment of one standard deviation on the original DA was related to an approximate four-fold increase (4.18) in the likelihood of re-abuse.

Although undoubtedly this suggests significant evidence for the predictive validity of the original DA for short-term re-abuse, the authors identified methodological problems with this study such as a small sample size ($N=47$), the short follow up period of 3 months, and a low participant retention rate of 53% that suggests the results should be interpreted with caution and that studies with larger sample sizes and more detailed outcome measures are still required (Goodman, Dutton, & Bennett, 2000).

Weisz, Tolman, and Saunders' study (2000) investigated whether the prediction of severe IPV could best be made by survivors' ratings of risk, items from the original DA, or a combination of the two. The bivariate analyses indicated that survivors' prediction of risk were strongly associated with subsequent violence over a four month follow-up period. It was also found that the items included from the original DA yielded an R^2 of .09, which was not significant, however, when survivors' predictions of the likelihood of repeat violence were added to the equation, the R^2 rose to .22 ($F = 3.52, p < .001$). The R^2 increase between the two steps was .33 ($F = 26.45, p < .001$), significantly improving the model of prediction. This finding supported the use of survivor predictions of risk with the original DA when assessing risk of future IPV (Weisz, Tolman, & Saunders, 2000). It is however, important to note that in this study only two thirds of the items on the original DA were assessed, and these items were evaluated individually rather than in combination as an entire tool as is intended. In addition, items were coded from criminal justice records using slightly different operationalisations in several cases (Roehl, O'Sullivan, Webster, & Campbell, 2005).

Conclusion

The original DA has amassed considerable literature to suggest that it is a valuable tool, albeit not a foolproof one, for predicting risk of repeat IPV and IPH. However, Campbell (1995)

highlights that the DA is a process, not a product to be used in isolation. She proposes that risk assessment should consist of two parallel processes- a brief re-offending risk assessment and a safety planning process carried out with the victim so that plans to can be put in place to better ensure the future safety of the victim.

Overall, studies conducted so far have provided generally promising findings in terms of the DA's validity and reliability, sensitivity, and specificity, however, the vast majority of this research has been conducted on the DA, and to date, little research has been conducted into examining the revised DA more closely. It is also important to note that the vast majority of this research has been conducted with the author of the DA and her research teams, therefore, it is apparent that more independent research into this tool is also required (Campbell, 1995).

In reviewing the DA, Dutton (2006) points out that Campbell's criterion for the DA was "women's perception of the danger of being killed by their partner," however, he highlights that the relationship of a partner's fear to the actual danger is unknown. He cites Brown's (2004) finding that women were twice as likely to fear death from a partner, adjusted for the objective probability of being killed, and that for either gender, objective probability of violence is greatly over-estimated if one fears for one's life as evidence of the difficulty of using this criterion.

While efforts have been made to ensure the generalisability of the DA to different ethnic and cultural groups in some studies, it is apparent that further work in this area is required. Campbell, Webster and Glass (2009) identified the need for the DA to be psychometrically validated with additional ethnic groups such as rural and immigrant populations in the United States to be sure they are culturally and linguistically appropriate (Campbell, Webster, & Glass, 2009). In addition, it does not appear that the DA has been validated outside of the United States. The inclusion of the item relating to the ownership of a gun is an item likely to be unique to the

United States where gun ownership is legal, which therefore creates difficulties in using the DA in other countries such as the United Kingdom where gun ownership is illegal and, therefore, more uncommon.

Most recently much work has focused on developing revisions of the DA for use with specific groups. In 2008 Glass et al. published the Danger Assessment- Revised (DA-R) to predict re-assault in abusive female same-sex relationships. In addition, short version risk assessment tools based on the DA have been created for use by professionals in front line services. A short four-item version called the Lethality Assessment has been developed for use by law enforcement officials responding to domestic violence calls and for use by healthcare professionals working with victims in emergency departments (Snider, Webster, O'Sullivan, & Campbell, 2009).

In conclusion, the strengths of the DA undoubtedly lie in its generally positive support regarding the reliability and validity of the tool, as well as its ease of use and accessibility to professionals and the general public alike. This means that the DA has the potential to be an extremely valuable IPH risk assessment tool in the U.K. that could be utilised in settings such as women's shelters where access to formal risk assessments conducted by social workers or psychologists may not always be widely available. However, before this is possible there needs to be wider investigation into the tool itself as much of the research to date has been conducted by the author of the DA. In addition, it will also be necessary to consider validation of the tool for use internationally as it would appear that currently this tool has only been validated for use within the United States.

CHAPTER FOUR

AN EMPIRICAL INVESTIGATION INTO THE PROCESS AND OUTCOMES OF MULTI-AGENCY JOINT SCRUTINY OF POLICE NOTIFICATIONS: A FEASIBILITY STUDY

An Empirical Investigation into the Process and Outcomes of Multi-Agency Joint Scrutiny of Police Notifications: A Feasibility Study

Abstract

Aim: This study investigated how effective, reliable and valid the Multi-agency Joint Screening process and the Barnardo's Multiagency Domestic Violence Risk Identification Threshold Scales (MDVRITS) are in identifying the risk and needs of children who reside in a family where an incident of IPV has been reported to the police.

Method: Ninety-three incidents of IPV from February 2010 were selected from the Multi-agency Joint Screening Team and West Midlands Police databases in order to collect anonymised baseline information about the IPV incident, perpetrator, victim and child. Follow-up information was then gathered over a 12-month period to determine the efficacy of the tool and the outcome for the children and families involved.

Results: The Multi-agency Joint Screening Team assigned cases with a higher number of IPV risk factors to higher and appropriate level scales during screening. The management of Scale 3 cases was found to be particularly effective, with risk level allocation consistent across time and fewer incidents reported to the police in the 12-month follow up. A considerable proportion of Scale 1 and Scale 2 cases were found to have further IPV incidents and increase in risk level over time. The risk factors of perpetrator mental health concerns, recent substance misuse, past violence or recent separation were found to be higher in the cases that increased in risk level over the follow-up period.

Conclusions: The study demonstrated the effectiveness of multi-agency work, particularly in relation to the intervention and management of Scale 3 cases. Recommendations were made regarding the management of Scale 1 and Scale 2 cases, as well as more consistent adherence to

the MDVRITS scale guidelines. The feasibility of running a large scale study investigating the validity and reliability of the MDVRITS in the future is also discussed.

INTRODUCTION

Current estimates reveal that family violence is the most widespread type of interpersonal violence experienced by women and young children (Kershaw, Budd, & Kinshott, 2000). Within England and Wales, the British Crime Survey reported that in 2012 7.3% of women and 5.0% of men reported having experienced IPV, which is equivalent to an estimated 1.2 million female victims and 800,000 male victims (Office for National Statistics, 2012). In the West Midlands region of England alone, 22% of violent crime recorded from April 2008 to March 2009 was IPV related (West Midlands Police, 2012). In total there were 42,444 IPV incidents during the same period, with only an estimated 35% of incidents reported to the police and about three quarters of these incidents were witnessed by children in the household (West Midlands Police, 2012). On average, 30.5% of IPV victims in the West Midlands area are repeat victims (West Midlands Police, 2012).

In Birmingham, the largest city in the West Midlands area and where this study is based, it is thought that between 33,000 and 40,000 children and young people (12-15%) will be exposed to IPV. Furthermore, it has been found that IPV is a central factor in 50%, and a contributing factor in a further 30% of Birmingham child deaths or serious injuries that have been subject to a Serious Case Review¹ (Birmingham Safeguarding Children Board, 2010). The considerable number of IPV incidents in Birmingham has significant knock-on effects for support agencies such as Birmingham Children's Social Care. During 2008-9, Birmingham Children's Social Care received over 14,000 notifications following concerns of IPV (Children and Young People's Partnership, 2011). In the first quarter of 2010/11 there were 1350 referrals

¹ A Serious Case Review is a review undertaken by the Local Safeguarding Children Board, Police Public Protection Unit, Children's Social Care and any other agency who was in contact with the child to investigate the case as well as identify any actions that would drive improvements in the prevention of death, serious injury or harm to a child in the future (NSPCC, 2011).

(equivalent to 5400 per year) to Children's Social Care in which IPV was a significant issue (Children and Young People's Partnership, 2011) indicating that IPV is a consistent and ongoing issue presented to many support agencies in Birmingham.

The Impact of IPV on the Child

The deleterious impact of exposure to IPV on children has been highlighted in the empirical literature (Holt, Buckley, & Whelan, 2008). Exposure to IPV can have varying impact at different stages of a child's life, with early and prolonged exposure potentially resulting in more severe problems for the child because it subsequently affects the child's developmental chain (Cunningham & Baker, 2004). At its most basic level, being exposed to IPV can be considered a form of emotional abuse for the child, with resulting negative implications for the child's emotional health, mental health and future relationships (Brandon & Lewis, 1996). The empirical evidence suggests that growing up in a home environment characterised by IPV can critically jeopardise the developmental progress of children, the cumulative effect of which may be carried into adulthood (Cunningham & Baker, 2004). Both observing intimate partner violence, or being directly maltreated can result in serious negative consequences for the child, such as poor verbal development, violent behaviour, psychosomatic symptoms, post-traumatic stress disorder, depression, anxiety, poor self-esteem and low academic achievement (Holt, Buckley, & Whelan, 2008; Lichter et al., 2004; Litrownik et al., 2003).

Such detrimental effects have been shown to be heightened for children who witness partner violence *and* experience child maltreatment (CM; Herrenkohl et al., 2008). The empirical literature highlights clear links between IPV and CM; specifically, it has been found that the presence of IPV in the family home has been demonstrated to be a significant risk factor for various forms of child abuse and neglect (Cox, Kotch & Everson, 2003; Edleson, 1999).

Children living in a household with IPV are at increased risk of being the direct victims of separate incidents of maltreatment by their parents, becoming involved in the parental violence, developing developmental difficulties, behavioural problems, and emotional dysregulation, (Cox, Kotch, & Everson, 2003).

Appel and Holden's (1998) review concludes that whilst children living in the context of IPV are at high risk of physical abuse themselves, the findings regarding prevalence rates fluctuate dramatically across studies due to methodological differences. A comprehensive review of the co-occurrence of IPV and child maltreatment placed rates of co-occurrence in a range of 45-70% and concluded that indeed, the presence of IPV is a risk factor for child physical abuse (Holt, Buckley, & Whelan, 2008). Similarly, a study conducted by Osofsky (1999) concluded that children who are exposed to IPV are 15 times more likely to be physically abused and neglected than children without such exposure.

Organisational Response to IPV

Despite the ever-growing empirical literature detailing the effects of children's exposure to IPV, it is still felt that the key health, social, legal and educational professionals have struggled to identify the signs, understand the dynamics of children's experiences and respond appropriately to their individual needs (Holt, Buckley, & Whelan, 2008). Given the significant degree of overlap between the two forms of family violence and the many potential negative outcomes for children, it is important to identify and effectively intervene with families where both forms exist or have the potential to develop. The need for holistic assessment frameworks that consider the risk of harm to the child, the protective factors in each family, and the interventions required has been highlighted in the literature (Cunningham & Baker, 2004; Holt, Buckley, & Whelan, 2008).

Multi-Agency Joint Screening Process

The need for joint organisational change towards promoting safeguarding and providing timely and appropriate responses to children at risk following any form of family violence was highlighted by the West Midlands Police, Birmingham Health, and Birmingham Children's Social Care under the "Working Together" requirements and the Family Common Assessment Framework (CAF) (Thiara & Chung, 2011). The "Working Together" requirements outline Police and Social Services response and co-ordination when responding to children in situations of IPV, while the CAF provides a method of assessing the needs of children in Birmingham to support earlier intervention and to improve joint working and communication between practitioners (Birmingham Safeguarding Children Board, 2009).

Dealing with IPV and child protection presents unique challenges, not least because of the historic institutional polarisation between child welfare focussed social work and the adult victim support agencies (Thiara & Chung, 2011). The framework for assessment used by social workers examines the parental relationship in relation to the child rather than the dynamics of IPV and is not institutionally set up to hold IPV perpetrators accountable (Thiara & Chung, 2011). Therefore, the need to overcome these specific difficulties and bridge these gaps was identified as necessary by all agencies involved.

In response to this identified need, Multiagency Joint Screenings were implemented across the West Midlands in the cities of Birmingham, Dudley and Coventry. This process outlines procedures for screening incidents of IPV where a child or unborn child was present, assessing risk, providing initial assessments, strategy meetings, child protection enquiries, and the recording of information and professional checks (Thiara & Chung, 2011). As a result of the "Working Together" requirement all incidents of IPV reported to West Midlands Police where a

child or unborn child resides within the home are scrutinised by Police, Social Care and professional partners from Health, Education and the voluntary sector where possible. These Multi-Agency Joint Screening meetings are attended by a Police Public Protection Unit officer, and Senior Practitioner Social Worker, and a Named Nurse/Midwife from Child Safeguarding team who meet between 1-3 days a week according to the volume of referrals received.

The aim of this protocol is to ensure timely sharing of information between agencies, to promote the well-being and safety of the child affected by IPV, to jointly assess the risk or safeguarding issues for the child, and to respond to the needs of the child (Birmingham Safeguarding Children Board, 2009). The benefit of the Multi-Agency Joint Screening process is that it enables services to undertake one assessment of the case between all the agencies involved and identify the most appropriate agency or agencies to respond (Thiara & Chung, 2011). This protocol speeds up the risk assessment process by streamlining the referral process and preventing repeat or unnecessary contact with the victim by different agencies which may put the victim at further risk (Thiara & Chung, 2011).

Although the Multi-agency Joint Screening process was implemented in different areas across the West Midlands, this study will focus on Birmingham South as an example of the implementation and delivery of the Multi-agency Joint Screening process within one specific area.

Multi-agency Response to IPV incidents

The following information describes the response of the Police, Health and Social care within the Multi-Agency Joint Screening process in Birmingham South. This information covers the process from the point at which officers from the West Midlands Police are called to an IPV

incident in Birmingham South where a child is present or is normally present, to the completion of any intervention aimed at protecting the child carried out by police, health or social care.

Figure 2 depicts this information pictorially, highlighting the roles, input and contributions of the agencies involved.

1.Domestic Violence Incident Occurs

As of February 2010, all West Midlands police officers attending any incident of threatening behaviour, violence or abuse (psychological, physical, sexual, financial or emotional) between adults who are/have been intimate partners or are family members are required to complete a WC 392 form and WC 392DASH risk assessment form (West Midlands Police, 2012). The Domestic Abuse Stalking and Honour based violence (DASH; Richards, 2009) tool is a 27-question risk assessment tool completed with the IPV victim that aids the responding police officer's professional judgement to identify the victim's risk of harm in relation to IPV (Richards, 2009). DASH is a risk assessment tool within its own right, but has been incorporated into the police WC 392 forms to help police officers identify adult victims who are at most risk of harm from IPV (Richards, 2009). DASH Risk scales are graded as Standard, Medium or Serious Harm.

After the 27 questions have been asked, the officer conducts intelligence checks on all parties involved in the incident to identify whether the offender is a serious and repeat perpetrator of violence. Additional information may also be considered as part of this risk assessment, for example, history of domestic violence between the parties or whether the perpetrator has access to firearms, before a judgement about level of risk is made.

Once the level of risk posed to the victim has been established by the police officer, consideration is given to what the immediate police response should be (e.g., arresting the

perpetrator, taking the victim to a safe house, or getting a restraining order). There are a number of both short and long-term options available that can be implemented by the police to manage the risk to IPV victims including arresting the perpetrator, implementing domestic abuse warning flags on police systems, fitting panic alarms in the victim's homes, or creating escape plans with victims.

This process identifies the victim's risk of harm and develops a risk management plan which will also consider any children. However, the DASH (Richards, 2009) is not used to determine the risk posed specifically to a child. Once completed, the WC392, WC392 DASH and crime papers are brought to the attending officer's supervisor for review.

2. Information Gathering Stage

A Domestic Abuse Officer based in the West Midlands Public Protection Unit will pick up referrals from front line staff via the police database once this information has been uploaded onto the police database by the attending officer. These referrals will already have been risk assessed and the Domestic Abuse Officer's role includes checking the information in the referral and reviewing previous IPV records so that the victim's answers to questions in the WC 392 DASH tool can be cross-referenced. All high risk cases are brought to the attention of the Domestic Abuse Officer's supervisor immediately so that priority action can be made and these cases can be referred on to relevant partner agencies within a 24-hour period from receiving the case.

In households where an incident of IPV has occurred and children are resident/normally resident, or where the victim or offender is pregnant, a referral will be made to Children's Services, and for children under 5 years old and unborn children an additional referral will be made to Safeguarding Children. These cases are referred on to Child Abuse Investigators by the

Domestic Abuse Officers so that they can be screened at the Multi-Agency Joint Screening meeting and level of risk to the child/children can be determined.

When the referral to Safeguarding Children has been received from the West Midlands Police the referral is allocated to a Safeguarding Named Nurse who is then responsible for gathering information regarding that child's health, wellbeing and involvement with other professionals. Information is requested from Health Visitors or School Nurses working with the child. Although there may have been more than one child present in the house when the incident of IPV occurred, only information about the youngest child is collected. The information received from Health Visitors or School Nurses regarding the child includes:

- a) Whether the child has been attending appointments appropriately
- b) Whether the child is the subject of a Common Assessment Framework (CAF), Child in Need, Child Protection Care Plan, or a Looked After Child (LAC) Plan.
- c) Whether the child is in the care of anyone other than his/her parents
- d) When and where the last Health Visitor or School Nurse contact with the child was
- e) Whether there are any other practitioners or agencies involved with the child's care

Children's Services are also sent a referral from police in instances of IPV where a child was or is normally present. When these referrals are received, a Senior Practitioner Social Worker checks the Birmingham Children's Services Integrated Children's System database to identify on-going or past information regarding the child and his/her family that may be useful for identifying additional risk factors or protective factors for that child. This information may include any past or current Child Protection enquiries, past or current Section 17 assessments, or past or current Children and Family Court Plans. The information collected by each of these agencies is recorded and brought to the Multi-agency Joint Screening meeting for review.

3. Joint Screening Meeting

The professionals attending the Multi-agency Joint Screening Birmingham South meet between 1-3 days a week depending on the number of referrals received. The information gathered from the three agencies is discussed and shared in the meeting and is used to complete their risk screening tool, the Barnardo's Multiagency Domestic Violence Risk Identification Threshold Scales (MDVRITS) which enables families to be assigned to one of four scales of varying risk of harm (Healy & Bell, 2005). The scales not only depict risk of harm to the child but, importantly, also guide professionals as to which interventions should be put in place for each scale. The MDVRITS is presented in detail in Appendix F and discussed in more detail below, but the following list describes the level of risk associated with each scale and the suggested interventions that accompany each of the four risk scales:

Scale 1:

A child's risk is attributed Scale 1 if the risk is deemed to be minimum to moderate (Bell, 2009; Healy & Bell, 2005). In this case, information gathered is shared with other agencies but there is no further action in terms of the screening team's involvement with the child. Information regarding domestic abuse support and basic safety planning advice *can* be offered to the victim or child through police or health involvement in the case (Birmingham Safeguarding Children Board, 2009).

Scale 2:

A child's risk is attributed Scale 2 if the risk is deemed to be moderate (Bell, 2009). In this instance, the victim is referred to domestic abuse support agencies and single agency support may also be considered if the Screening Team feel there is need for additional involvement with services. A Common Assessment Framework (CAF) approach may also

be considered if the Multi-agency Joint Screening Team feels it is appropriate (Birmingham Safeguarding Children Board, 2009).

Scale 3:

A child's risk is attributed Scale 3 if the risk is deemed to be serious (Bell, 2009). In the event of assignment to this scale, a referral to Children's and Family's team is made for a Section 17 assessment to be completed. A Section 17 assessment is a comprehensive child-centred assessment of a child's needs that takes into account all the relevant domains in that child's life. A referral for the assessment of Children in Need and their families may also be made. This is a Social Care led assessment completed to determine whether a child is in need. The assessment of Children in Need can involve several overlapping phases and results in systematic planning, intervention and review of the child's developmental progress. The Multi-Agency Joint Screening team may also suggest that a cross agency joint visit with the child or family may be appropriate (Birmingham Safeguarding Children Board, 2009).

Scale 4:

This is the most serious scale; a child is attributed to Scale 4 if risk is deemed to be severe or if a previous Section 47 has been initiated in the past and is still open at the time of the incident being screened (Bell, 2009). If a Section 47 case is not already open for the child, a full Social Care Referral for Section 47 is likely to be initiated. A Section 47 places the duty on the Local Authority to investigate and make inquiries into the circumstances of children considered to be at risk of significant harm and, where there is deemed to be need, to decide what action may be needed to safeguard and promote the child's welfare (Local Safeguarding Children Board Birmingham). Social Care has lead responsibility for

undertaking these enquiries with other agencies, in particular, Police, Health and Education. Agencies involved in the joint screening process have a duty to make enquiries into a child's welfare if they have 'reasonable cause to suspect that a child who lives, or is found in their area is suffering, or is likely to suffer significant harm (Birmingham Safeguarding Children Board, 2009).

A Multi-agency Risk Assessment Conference (MARAC) may also be instigated. MARAC meetings offer a platform for professionals to share information on very high risk cases of IPV. Information about the risks faced by the victims, the actions needed to ensure safety of the victim and child, and the resources available locally are discussed and used to create a risk management plan involving all agencies. The Multi-Agency Joint Screening team may also suggest that a cross agency joint visit with the child or family may be appropriate.

In all cases, the screening team are responsible for notifying partner agencies who are not part of the screening team, but who are engaged in working with the child or family of outcomes from the screening process for Scales 1, 2, 3, and 4.

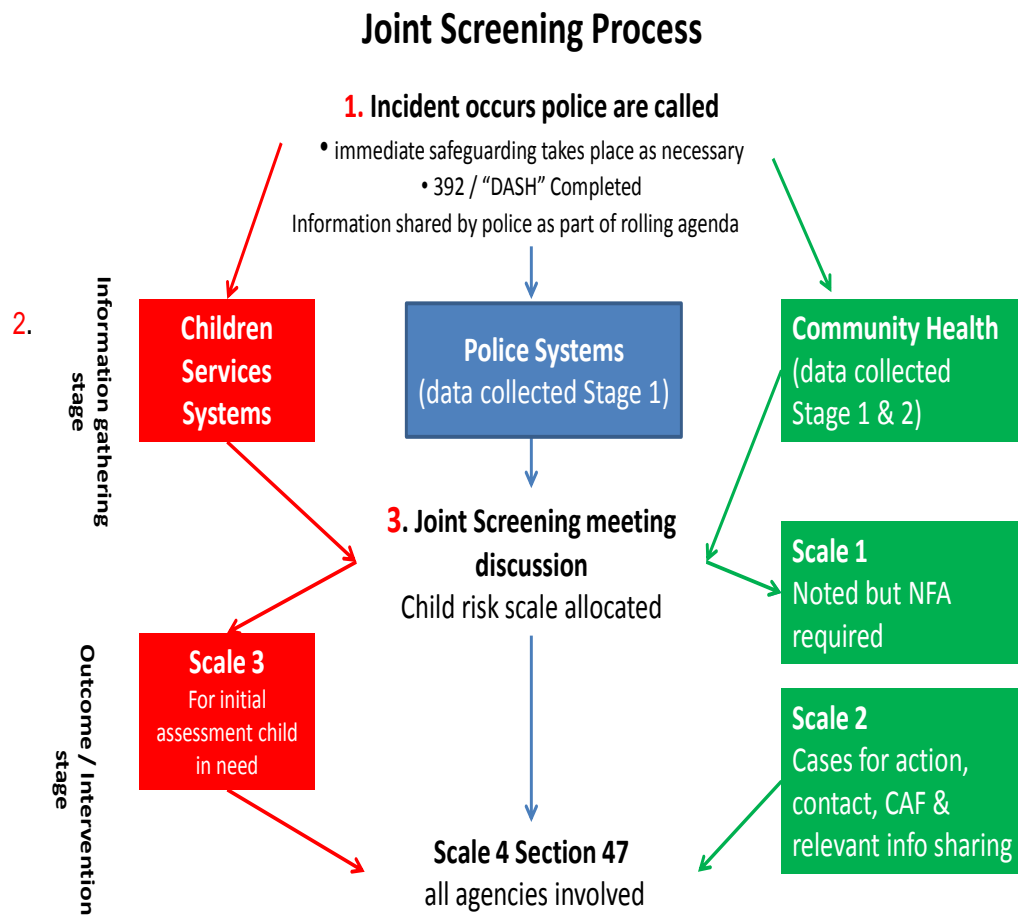


Figure 2: Multi-agency Joint Screening Process Flowchart

Domestic Violence Risk Assessment Model (DVRAM)

In terms of assessing risk, there are multiple tools used that are routinely used to assess the risk of harm to an adult victim from an intimate partner, such as the Spousal Assault Risk Assessment Guide (SARA 2nd Edition; Kropp et al., 1995) or the Danger Assessment Scale (Campbell, Webster, & Glass, 2009). Unfortunately, there are far fewer risk assessment tools that assess the direct and indirect risk of harm to a child who resides in a household where IPV is present.

The DVRAM is a multi-agency assessment tool designed to assess the severity of risk posed by IPV within families where children are present (Bell, 2009). The tool is aimed at ensuring that practitioners are competent in current practice and have the essential knowledge-base to identify the risks of IPV in the family home for the child and respond appropriately (Healy & Bell, 2005). The tool was primarily designed for use by social workers who are likely to encounter the issue of IPV in their work, but it is also used in multi-agency work by a range of professionals working with families where IPV is present (Healy & Bell, 2005).

The DVRAM was created to fill an identified need for a specific assessment tool to aid practitioners in assessing the risks presented by IPV in homes where children are present and to inform decisions about the types of interventions required. Healy and Bell (2005) reported that research and training analysis highlighted concerns about the previous IPV assessments being utilised in Northern Ireland. It was noted that there was a clear absence of policy and procedures relating to IPV, and there was evidence of inconsistencies in decision-making and recording in IPV cases (Healy & Bell, 2005). It was noted that social workers were responsible for assessing risk and making decisions and the child protection issues presented by IPV, however, there were no explicit instructions to guide how these risks were assessed (Healy & Bell, 2005). In addition, it was felt that there was a lack of clear categorisation into family support or child protection cases and there was need for research and training on the impact of children's exposure to IPV in the family home (Healy & Bell, 2005).

As a result of this identified need, a pilot study was conducted by Barnardo's² in Ulster Community & Hospitals Trust (UCHT) and the Southern Health and Social Services Board (SHSSB) which introduced the use of the DVRAM in 2003 in an attempt to provide staff with a

² Barnardo's is the largest children's charity in the UK that provides funding to conduct research into factors such as IPV which affect the welfare of children in the UK.

framework and tool to carry out assessments of risk and implement support in an informed and consistent manner (Healy & Bell, 2005). Feedback from these pilot studies indicated that social workers had found the DVRAM a useful tool that enabled them to focus on the risks presented to children by IPV which facilitated their subsequent decision making (Healy & Bell, 2005). It was reported that professionals using the tool felt it expanded their knowledge of the dynamics of IPV and enhanced their confidence in their skills to deal with the issue of IPV when it arose in their case load (Healy & Bell, 2005).

The DVRAM model is based on five principles which are:

- a) Protecting the children is the first priority
- b) Protecting the non-abusing parent helps protect the children
- c) Providing supportive resources to the non-abusing parent will help protect and care for the children
- d) Holding the perpetrator responsible for the abusive behaviour
- e) Respecting the non-abusing parent's right to direct his/her own life without placing the children at increased risk of further abuse from violence

The DVRAM consists of three components: i) a core assessment tool with nine assessment areas, ii) Multi-agency Risk Identification Matrix (MDVRITS) and iii) safety planning interventions for women, children and young people. The nine assessment areas are highlighted as the key areas to assist social workers and other professionals reach decisions about when a child is “in need” or “in need of protection” (Healy & Bell, 2005). These assessment areas are: nature of the abuse, risks to the children posed by the perpetrator, risks of lethality, perpetrator's pattern of assault and coercive behaviour, impact of the abuse on the woman, impact of the abuse on the children, impact of the abuse on parenting roles, protective factors and the outcome of the

woman's past help-seeking (Healy & Bell, 2005).

Multiagency Domestic Violence Risk Identification Threshold Scales (MDVRITS)

Barnardo's MDVRITS (Bell, 2007) is one component of DVRAM and is a checklist of risk factors, protective factors and potential vulnerabilities that enables the analysis of child risk from IPV and assignment to one of four risk scales (see above description; Calder, 2008). One of the reported strengths of the MDVRITS tool is the emphasis on a detailed recording procedure which aims to provide an up to date family history, highlight areas of concern, and can be used by other practitioners working with the family in the future (Healy & Bell, 2005). This information can then be used to identify gaps in knowledge about the child and family and also to begin the process of assessing the risk presented.

The MDVRITS is made up of checklist of factors ranging from 13 items for Scale 1, to 44 items for Scale 4. It outlines risk factors, potential vulnerabilities and protective factors present for families at each of the four scales and encourages a comprehensive analysis of risk by trained professionals using the tool (Healy & Bell, 2000; Appendix F). The MDVRITS possesses some elements of a structured risk assessment tool in that it identifies the risk factors consistently supported by research, and identifies service delivery and resourcing decisions based on an overall score. It also includes a simple scoring system and provides evidence boxes for assessors to add additional information and/or justify their scoring.

Local Multi-agency Joint Screening

This Multi-agency Joint Screening meeting protocol implemented across the West Midlands uses just one element of the DVRAM package- the MDVRITS. The Multi-agency Joint Screening protocol has been in operation since January 2010 in the West Midlands area. This

Multi-agency Joint Screening process was originally piloted in Coventry in 2006 and an evaluation of this pilot scheme was completed between October 2006 and June 2008. The evaluation examined the effectiveness and benefits of the process, and aimed to identify how the pilot could be further developed to include other key partner agencies for replication in other locations in the West Midlands.

During October 2006 and June 2008 a total of 7,916 cases were screened by the Multi-agency Joint Screening team in Coventry, which averaged 377 screenings per month. The evaluation reported favourable findings (Thiara & Chung, 2008). Some of the identified advantages of the process included a more streamlined recording of information, increased contact between agencies and partnership work, increased consistency in the screening process, a timelier processing of cases, and increased intensity of intervention being focused on higher risk cases (Thiara & Chung, 2008). Whilst a process evaluation of the Multi-Agency Joint Screening process has been undertaken, the use of the MDVRITS has not been subjected to a medium to long-term outcome evaluation, which is essential if practitioners and the public are to have confidence in the use of this tool.

Objectives of the Research

This project aims to conduct a small scale study to evaluate the West Midlands Multi-agency Joint Screening process by focussing on its implementation in Birmingham South. In essence, this research aims to outline the feasibility of running a large scale study investigating the reliability of the MDVRITS on a larger scale in the future.

More specifically, this study will focus on the use of the MDVRITS within the Multi-agency Joint Screening process within Birmingham South. That is, it aims to investigate how effective, reliable and valid the Multi-agency Joint Screening process and MDVRITS are in identifying the

risk and needs of children who reside in a family where an incident of IPV has been reported to the West Midlands Police. Although the screening process is designed to identify all types of domestic abuse where a child is present within the household, this project will limit its investigation to incidents of IPV. This is to ensure consistency across cases in a resource limited study and due to the frequency of overlap of these forms of maltreatment in the family (Appel & Holden, 1998).

The following research questions will be examined in this study:

1. Investigate/describe the demographics, offence descriptions and risk profiles of cases assigned to each of the four MDVRITS scales at baseline.
2. Investigate family outcomes for cases assigned to each of the four MDVRITS scales one year from baseline.
3. Investigate professionals' ability to consistently assign children to pre-determined risk levels.
4. Investigate the perspectives of professionals attending the Joint Screening meeting from multiple disciplines about the procedure and delivery of the Joint Screening process.

METHODOLOGY

Research Team

The research team consisted of five members from four different organisations which included the University of Birmingham, Birmingham Safeguarding Children, West Midlands Police and Birmingham Children's Hospital. Clare Edwards (Birmingham Safeguarding Children), Dr. Geoff DeBelle (Birmingham Children's Hospital) and Rachel Jones (West Midlands Police) identified the need for the Multi-agency Joint Screening Process and the

MDVRITS to be investigated and applied for a grant from BASPCAN to fund this study. Research questions to be investigated were decided as a research team and Laura Robinson (Lead Researcher) and Dr Louise Dixon (Research Supervisor) from the University of Birmingham were contacted to help carry out the study. Project design was completed by the Lead Research and Research Supervisor and all subsequent data collection, data analysis, and project write-up was completed by the Lead Researcher under the supervision of the Research Supervisor and in consultation with the research team.

Ethical Approval

In order to commence this project it was necessary to collaborate with a number of professionals and agencies within Birmingham to be granted ethical approval. This project involved the collation of Multi-agency Joint Screening data for Birmingham South NHS healthcare records and West Midlands Police data.

The first step taken to determine how to get ethical approval for this study was to contact the NRES (National Research Ethics Service) for the NHS as both the Multi-Agency Joint Screening data and the health outcome data are held in NHS databases. NRES was contacted to ask their recommendations regarding who needed to be contacted to gain approval from NHS Research Ethics Committee and NHS Research and Development sites for this project. NRES stated that NHS REC was not needed as this project was considered a service evaluation, but rather NHS R&D approval should be sought for each NHS R&D site that data would be collected from. Approval was then applied for from the R & D site in the NHS trust covering Birmingham South and approval was granted from Birmingham Community Healthcare Trust in May 2011 (Appendix G).

As the research team consisted of a Lecturer and student attending the University of Birmingham, STEM (Science, Technology, Engineering and Maths) ethical review committee was also contacted for ethical approval for this project. Seeking approval from the University of Birmingham STEM committee allowed for the collection of data in the West Midlands Police first, and then follow up these cases in health. Approval from the University of Birmingham STEM committee was received in May 2011 (Appendix H). At the same point, security clearance and vetting was applied for from the West Midlands Police for clearance to collate data held on West Midlands police databases. This approval was granted in May 2011 (Appendix I).

Police data collection commenced in October, 2011. Once familiar with the computer systems and what data was stored on these systems it became clear that it was not possible to identify a stratified random sample of families for this study as the police databases did not hold sufficient data on the screening levels assigned to families. Therefore, after this pilot investigation, it was then necessary to apply for approval to identify participants from the Birmingham Multi-agency Joint Screening team database and then follow these up in the police records. Approval for this change and sponsorship from University of Birmingham STEM ethics committee was requested and gained in March 2012 (Appendix J).

Due to the extended period of time already spent requesting ethical clearance from various agencies, coupled with the time constraints of the current project, it was decided at this point that it would be necessary to recruit staff from health to collate the data anonymously for data collection in Health and this anonymous information could then be passed on to the research team for follow-up in other agencies.

Participants

In 2010 there were 2763 incidents screened by the Birmingham South Multi-agency Joint

Screening Team. Of these incidents, 1052 (38%) were repeat incidents within the same family. Data for this study investigated incidents that took place in February 2010.

Records indicated that 174 IPV related incidents were screened in February 2010 in Birmingham South. All cases included in the study were subject to a Domestic Abuse Risk Assessment in February 2010 after the reporting of an incident of partner violence where a child was resident or usually resident in the household. Only those cases involving IPV were selected from the records available. A total of 104 families were selected from the Multi-Agency Joint Screening database for Birmingham South located in Birmingham Safeguarding Children using random sampling technique. Eleven participants were de-selected from this total because they did not have records accessible in both the Joint Screening database and the West Midlands Police databases; therefore, this resulted in a total of 93 participants in this study. Cases were then sorted according to MDVRITS scale level. The makeup of participants based on Scale level is as follows: 28 Scale 1 (30%), 32 Scale 2 (34%), 14 Scale 3 (15%), 19 Scale 4 (20%) with a total N of 93 participants in the current study.

In terms of the type of abuse inflicted during the incident IPV recorded, 27% of the reported abuse was emotional, 21% was physical abuse, 2% was neglect, 27% was other forms of abuse and in 3% of cases the nature of the abuse inflicted was not recorded.

As a note, perpetrators of the IPV offences in this sample will be referred to as ‘alleged perpetrators’ throughout this study as at the stage of data collection some had not been charged with an offence relating to the IPV incident.

Procedure

For the purpose of this study incidents of ‘domestic abuse’ were confined IPV to ensure consistency across cases in a resource limited study, and as this type of family violence has been

highlighted to pose the biggest risk to children in the literature it is of greatest interest. In this study partner violence was defined as: any incident or pattern of incidents of controlling, coercive or threatening behaviour, violence or abuse between those aged 16 or over who are or have been intimate partners regardless of gender or sexuality (Home Office, 2013).

Baseline information related to the IPV incident and the child's well-being for participants was collated using information located in the Multi-agency Joint Screening database and Police information held in West Midlands Police headquarters. These cases were then followed up over a 12-month period until February 2011, when variables relating to child and family outcomes were recorded as outcome data.

Before data collection commenced, the research team met to decide which outcome variables would be used to assess the efficacy, reliability and validity of the MDVRITS screening tool. It was decided that the primary outcome variable in this study would be whether the child was safe from harm and there was no on-going concern for the safety of his/her mother. This outcome was measured by considering variables such as the number of police call-outs over a year follow-up period, the number of multi-agency screenings undertaken over a year period, and the presence of any Child Protection Plans since baseline. The team determined information that was to be collected for baseline and one year follow-up information, and time was also spent identifying which of the three databases (Multi-Agency Screening, Police or Health) the information was held in.

Data collection in Joint Screening and Police databases

The Joint Screening database held in Safeguarding Children holds information exchanged during Joint Screening meetings between the West Midlands Police, Birmingham Social Care and Health. After participants were identified in the Joint Screening database as outlined above,

data was collected for each case using a predetermined measure that defines all the variables to be extracted from the Joint Screening database and Police databases.

Once this information was collected for all participants in the Multi-agency Joint Screening database, the cases were then tracked into West Midlands Police using a unique screening code. The unique screening code is available for each IPV incident and the number is used by the agencies involved in the screening process to track families between agencies so that they can be easily identified within the systems. The researcher recorded this unique screening number in the electronic database alongside other family variables so that it was clear which families had already been included in the dataset throughout the data collection phase. This was necessary so that the researcher did not duplicate data, which could easily happen if no identifying details were taken down at this stage.

During data collection in the West Midlands Police Headquarters a member of the Public Protection Unit enabled access to four databases (CRIMES database, OASYS, FLINTS and Crime Scan) to collect the predetermined information about the alleged perpetrator of the IPV incident, the victim, and the IPV incident itself. This information was collated and transferred into an Excel Spreadsheet along with the data already collected from the Multi-Agency Joint Screening database.

A proforma was developed that outlined precise definitions of each variable collected from the West Midlands Police database (Appendix K) to ensure data was collected in a systematic way across cases, therefore, improving the accuracy and reliability of the data collected.

Data was also collated confidentially and transferred directly into an electronic spreadsheet that was password protected and remained within the West Midlands Police Headquarters at all times. All identifying information was then removed and this anonymised data was then stored

on an encrypted memory stick. No identifying details about the cases such as name, address, date of birth were taken out of the West Midlands Police Headquarters.

The use of a unique ID number code was considered to be better than extracting names and addresses of families, as it is meaningless information to anyone other than those people who have legitimate access to the databases in Birmingham Joint Screening and West Midlands Police. Regardless of this, as an additional safety measure the unique screening code was stored in a separate file (on a separate encrypted memory stick) alongside research ID codes, therefore, making the database anonymous to others, even those with legitimate access to the databases. In addition, no raw or identifying information will be referred to in the published findings of this evaluation and all data will be kept for a 10 year period in accordance with University of Birmingham STEM rules.

The second stage of the project involved collating outcome data for each case after a one year follow-up period (i.e., until 1st February 2011). Outcome data was collated from the West Midlands Police and the Safeguarding Children database. To ensure that no identifiable information was seen by the researcher, a Named Safeguarding Children Nurse with legitimate access to identifiable data collated the data from patient records and removed all identifiable data from the cases so it could be given to the researcher.

In addition, focus groups were conducted with multi-agency professionals (N = 3) who were working as part of one of the Joint Screening teams in Birmingham to capture the first-hand knowledge and experience from those working in the field of children protection and risk assessment. The aim of these discussions was to gather information about the group processes and ways in which the Multi-agency Joint Screening process or the use of the MDVRITS tool could be improved. Information about the aims of the focus group was provided to each

professional beforehand (Appendices L) and each professional was asked for their consent to take part in the focus group (Appendix M).

The first part of the focus group consisted of a mock screening of four cases by the Multi-agency Joint Screening Team to assess the professionals' ability to consistently assign children to pre-determined risk levels as outlined by the MDVRITS. The Joint Screening team were provided with the police incident report for four incidents (one from each scale level) that had previously been screened by a Multi-agency Joint Screening Team for the same geographic area in 2010. The professionals were able to access any additional information they required in the police database and were asked to discuss the case as if they were screening the case normally. Consent was obtained from each of the professionals for their discussion to be audio recorded. The outcome of each of the four mock screening cases were also recorded and compared against the previous Joint Screening Team's scale allocation decision for each case in 2010. Professionals were also asked semi-structured interview questions (Appendix N). All responses were recorded on an audio recording device and downloaded onto a secure USB to be coded anonymously. All information from the focus groups were held confidentially on a secure password protected USB drive that only the researcher had access to. All professionals were provided with debriefing sheets following their participation in the focus group.

Treatment of Data

Statistical analysis for quantitative data was used for Research Questions 1-3. It should be noted that during analyses where chi-square analyses were undertaken, Fisher's Exact Test was used when 20% or more of cells had an expected count less than 5 (Field, 2009). In addition, as a general rule, statistical analyses were only run on the data where cells were large enough to allow for meaningful analyses. In addition, where multiple pairwise tests were performed, the

Bonferroni correction statistic was used to correct for the chance of type I error across multiple tests.

In relation to Research Question 1 the risk factors used for comparison were based on items of the Spousal Assault Risk Assessment Guide (SARA -2nd Edition; Kropp et al., 1995) and the Danger Assessment (reviewed in Chapter Three) (Campbell, Webster, & Glass, 2009). The SARA is a 20-item structured professional judgement tool that is used to assess the risk for future spousal abuse in adult male offenders (Millar, 2009). It is the most widely used structured professional judgement tool for IPV risk evaluations (Hanson, Bourgon, & Helmus, 2007). The Danger Assessment Scale (DA) is a risk assessment tool that was initially developed to predict Intimate Partner Homicide but is also frequently used to predict spousal assault recidivism (Hanson, Bourgon, & Helmus, 2007). Due to constraints in the data available in the databases, not all risk factors from the SARA and DA could be utilised. The data collected as part of this study could be organised into ten risk factors across the SARA and DA (Campbell, Webster, & Glass, 2009; Kropp et al., 1995) as a way of determining an overview of risk profiles for each scale level.

In relation to Research Question 4, it was decided that a qualitative methodological approach was deemed to be most suitable for analysing the data from the focus group interviews with the Multi-agency Joint Screening professionals. Once the information from these interviews was transcribed content analysis was used to identify themes and trends in the data. Qualitative Description was then used as a means of presenting the information from the interviews as this method is particularly well suited to answering the “why,” “how” and “what” questions needed to investigate the perspectives of the professionals (Neergaard, Olesen, Andersen, & Sondergaard, 2009).

RESULTS

Research Question 1: Investigate/describe the demographics, offence description and risk profiles of cases assigned to each of the four MDVRITS scales at baseline.

Preliminary analyses were completed using descriptive statistics to provide an overview of the demographics of the victims and perpetrators of the IPV incidents as well as provide information about the nature and details of the IPV incidents themselves. The results are divided into three sections- Demographics, Offence Descriptions and Risk Descriptions.

i) DEMOGRAPHICS

Table 4 shows the vast majority of the IPV incidents in the sample were perpetrated by male alleged perpetrators towards female victims (93.5%). Incidents in which a female perpetrated against a male victim accounted for 5% of the sample, and incidents in which both a female and male were recorded as being reciprocally violent accounted for 1% of all IPV incidents.

Analysis of data when categorised by scale level showed similar findings, with all scale levels showing that the majority of IPV incidents were carried out by male alleged perpetrators against female victims. It was noted that Scale 3 included the only incident of reciprocal violence, and Scale 4 showed a higher percentage of incidents in which a female perpetrated against a male victim (11%) compared to the other three scale levels (4%, 6% and 0% respectively). Chi-square analyses revealed that there were significantly more incidents of males perpetrating against females victims in Scale 1, 2 and 4 incidents (Scale 1: $\chi^2 (1, N=92) = 28.00$, $p = .036$; Scale 2: $\chi^2 (1, N = 92) = 31.00$, $p=.002$; Scale 4: $\chi^2 (1, N=92) = 19.00$, $p =.006$).

Table 4
Gender of perpetrator and victims during IPV incident

		Scale 1 n (%)	Scale 2** n (%)	Scale 3 n (%)	Scale 4*** n (%)	Totals n (%)
Type of Incident	Male – Female	27 (96.4%)*	29 (93.5%)**	13 (92.8%)	17 (89.5%)**	86 (93.5%)
	Female – Male	1 (3.6%)	2 (6.5%)	0 (0%)	2 (10.5%)	5 (5.4%)
	Female - Female	0 (0%)	0(0%)	0 (0%)	0 (0%)	0 (0%)
	Male – Male	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	Reciprocal Violence (M-F & F-M)	0 (0%)	0 (0%)	1 (7.1%)	0 (0%)	1 (1.1%)
	Total n size	28	31	14	19	92

* p < .05, **p < .01

The age of victims in the sample ranged from 16 to 47 years and alleged perpetrators from 18 to 50. Both victims and alleged perpetrators were most likely to be aged between 19 and 28 years. Figure 3 shows the mean age and standard error for the IPV victims and alleged perpetrators. There were no significant differences between age of the alleged perpetrators and victims at any Scale level. In addition, there was no significant difference between victim ages across the four scale levels or between perpetrator ages across the four scale levels.

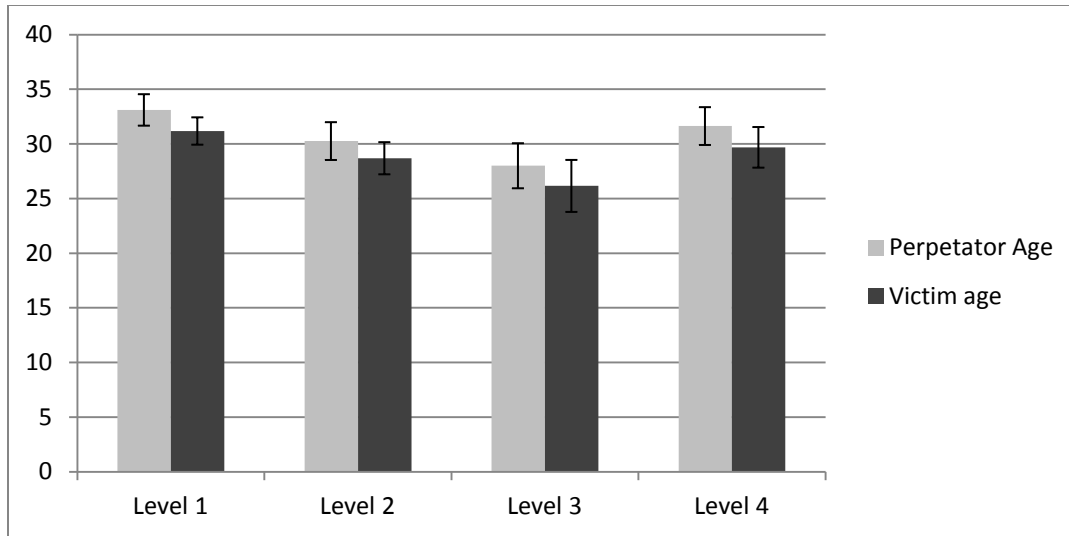


Figure 3: Bar chart showing the mean age of alleged perpetrators and victims of IPV incidents in the study sample according to scale level ($N = 182$)

Figure 4 shows the majority of the sample ($n = 66$, 71%) were White European followed by Black African or Caribbean ethnicity ($n = 8$, 9%). Other groups made up between 1 – 3 % of the sample and information about the ethnicity of the victim was not available for 10% ($n = 9$). There was no statistical difference between the victims' ethnicities according to scale level.

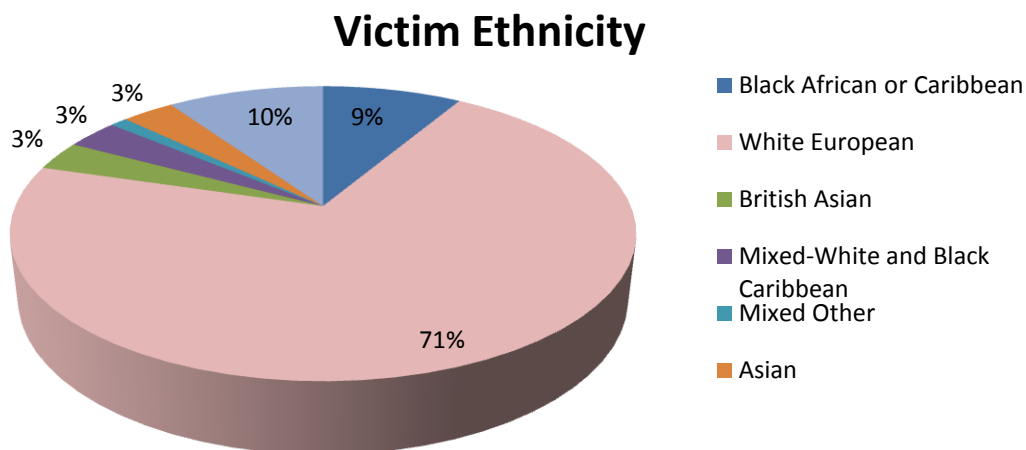


Figure 4: Pie chart showing ethnicity of victims of IPV in sample ($N=93$)

ii) OFFENCE DESCRIPTION OF CASES ASSIGNED TO THE FOUR SCALES

The majority of IPV incidents assigned to each scale were characterised by one to two children present in the household at the time (Table 5). One-way ANOVA analysis revealed no significant difference between the number of children in the household during IPV incident across scale levels.

Table 5

Number of children present in household during IPV incident according to scale level (N = 92)

Number of Children in household during IPV incident	Scale 1 (n = 28) n (%)	Scale 2 (n = 31) n (%)	Scale 3 (n = 14) n (%)	Scale 4 (n = 19) n (%)
0 Children	0 (0%)	2 (6.5%)	1 (7.1%)	1 (5.3%)
1 Child	10 (35.7%)	12 (38.7%)	5 (35.7%)	12 (63.2%)
2 Children	9 (32.1%)	13 (41.9%)	5 (35.7%)	4 (21.1%)
3 Children	6 (21.4%)	2 (6.5%)	2 (14.3%)	0 (0%)
4 Children	2 (7.1%)	2 (6.5%)	0 (0%)	2 (10.5%)
5 Children	1 (3.6%)	0 (0%)	1 (7.1%)	0 (0%)

Table 6 shows that in the majority of cases (n = 49) the child did not directly witness the IPV incident. According to scale level, 46% of Scale 1, 19% of Scale 2, 50% of Scale 3 and 26% of Scale 4 IPV incidents were directly witnessed by at least one child in the household. However, chi-square analyses using a Bonferroni adjusted alpha level of .008 (to correct for the chance of type I error across multiple tests) showed there were no significant differences between whether children directly witnessed the IPV incident according to scale level.

Table 6

Table showing whether child directly witnessed IPV incident (N = 93)

Did child(ren) directly witness IPV incident?	Scale 1 (n = 28) n (%)	Scale 2 (n = 32) n (%)	Scale 3 (n = 14) n (%)	Scale 4 (n = 19) n (%)
Yes	13 (46.4%)	6 (18.8%)	7 (50.0%)	5 (26.3%)
No	12 (42.9%)	22 (68.8%)	4 (28.6%)	11 (57.9%)
Not known	2 (7.1%)	4 (12.5%)	3 (21.4%)	3 (15.8%)
Not applicable	1 (3.6%)	0 (0%)	0 (0%)	0 (0%)

Data was collected regarding the relationship between the alleged perpetrator, the victim and the child present, or normally present in the household (Table 7). It was found that, overall, 74.7% of the alleged perpetrators of the IPV incidents were a biological parent to at least one child in the household, and ex-partners who were not a biological parent to any of the children accounted for 19.8% of the alleged perpetrators in the total sample. In addition, alleged perpetrators who were in a relationship with the victim at the time of the incident, but were not a biological parent to any of the children in the household accounted for only 5.5% of the alleged perpetrators in the sample. This significant difference held true for further analysis within each scale. Pair-wise chi-square analyses revealed that cases assigned to Scale 1 had significantly more alleged perpetrators who were ex-partners and not the biological parent to any child in the home compared to Scale 2 and Scale 4 alleged perpetrators (Scale 1x2: χ^2 (1, N= 58) = 9.10, $p < .008$; Scale 1x 4: χ^2 (1, N= 46) = 8.45, $p < .008$). This finding was found to still be significant using the Bonferroni correction adjusted alpha level of .008. No other significant differences between scales were found.

Table 7

Description of alleged perpetrator's relationship to child involved in IPV incident (N = 91)

Alleged perpetrator's relationship to child involved in IPV incident		Scale 1 (n = 27)	Scale 2 (n = 31)	Scale 3 (n = 14)	Scale 4 (n = 19)	Total
		n (%)	n (%)	n (%)	n (%)	n (%)
Biological parent to at least one child	Male	14 (51.9%)	23 (74.2%)	10 (71.4%)	15 (78.9%)	68 (74.7%)
	Female	1 (3.7%)	2 (6.5%)	0 (0%)	2 (10.5%)	
	Reciprocal	0 (0%)	0 (0%)	1 (7.1%)	0 (0%)	
	Total	15 (55.6%)	25 (80.6%)	11 (78.6%)	17 (89.5%)	
Non-biological parent/current partner	Male	0 (0%)	3 (9.7%)	1 (7.1%)	1 (5.3%)	5 (5.5%)
	Female	0 (0%)	0 (0%)	0 (0%)	0 (0%)	
	Total	0 (0%)	3 (9.7%)	1 (7.1%)	1 (5.3%)	
Non-biological parent/ex-partner	Male	12 (44.4%)	3 (9.7%)	2 (14.3%)	1 (5.3%)	18 (19.8%)
	Female	0 (0%)	0 (0%)	0 (0%)	0 (0%)	
	Total	12 (44.4%) **	3 (9.7%)	2 (14.3%)	1 (5.3%)	
Lodger	Total	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0%

* p < .05, **p < .01

Table 8 shows that the majority of perpetrators (67.8%) were not living the family home at the time of the IPV incident. This direction was also noted across the four scales, however, chi square analyses did not reach significance.

It was noted in the cases of female perpetration of IPV that in Scale 1 the female perpetrator was not living in the home at the time. Scale 2 and Scale 4 both had one incident in which the female was living in the family home at the time, and one incident in which she was not. It was also noted that in the one case of reported reciprocal violence both perpetrators were living in the family home at the time of the IPV incident. Overall, cases of female IPV perpetrators were too low to perform meaningful statistical analysis.

Table 8

Table showing whether alleged perpetrator of IPV incident was living in family home at the time of the incident

Alleged perpetrator living in family home at time of IPV incident		Scale 1 (n = 26)	Scale 2 (n = 30)	Scale 3 (n = 14)	Scale 4 (n = 17)	Total (N = 87)
		n (%)	n (%)	n (%)	n (%)	
Yes	Male	7 (26.9%)	12 (40.0%)	4 (28.6%)	2 (11.7%)	32.2 %
	Female	0 (0%)	1 (3.3%)	0 (0%)	1 (5.9%)	
	Reciprocal	0 (0%)	0 (0%)	1 (7.1%)	0 (0%)	
No	Male	18 (69.2%)	16 (53.3%)	9 (64.3%)	13 (76.5%)	67.8%
	Female	1 (3.8%)	1 (3.3%)	0 (0%)	1 (5.9%)	

Table 9 reports the nature of IPV incidents. In incidents in which two or more different offences were committed within the same incident the more serious offence was coded. The majority of IPV incidents were categorised as verbal abuse (39.8%), 25.8% of incidents were categorised as physical assaults, 14% were categorised as harassment, 7.5% were classified as destruction of property, 4.3% involved threats to harm the victim or child or to self-harm, while threats to kill or seriously harm the victim or a child, breach of bail/ non-molestation order, intimidation, and theft each accounted for 2.2% of the IPV incidents in the sample.

It was also noted that the majority of Scale 1 incidents consisted of verbal abuse (57.1%), followed by harassment (21.4%), destruction of property (14.3%) and threats to harm the parent or child (7.2%). Scale 2 incidents again consisted of a majority of incidents involving verbal abuse (46.9%), followed by physical assault (25.1%), destruction of property (9.4%), threats to harm mother or child (6.3%), theft (3.1%), harassment (3.1%) intimidation (3.1%) and threats to kill or seriously harm mother or child (3.1%). It was at Scale 3 that the nature of the majority of

incidents shifted towards involving physical assault (85.7%), followed by threats to harm mother or child (7.1%) or threats to kill or seriously harm mother or child (7.1%). Finally, Scale 4 incidents consisted of a majority of IPV incidents involving verbal abuse (39.8%), followed by harassment (14%), physical assault (21.1%), breach of bail or non-molestation order (10.5%), theft (5.3%) or intimidation (5.3%).

Chi-square analyses were conducted where cases were large enough to conduct meaningful analyses. A chi-square analysis for the number of IPV incidents involving verbal abuse across scale levels showed significant differences between scale levels (χ^2 (3, N=93) = 11.86, $p < .01$). Further pairwise comparisons showed that Scale 1 had significantly more IPV incidents consisting of verbal abuse (χ^2 (1, N= 42) = 9.69, $p < .008$). This comparison was significant using a Bonferroni correction adjusted alpha value of .008.

Another chi-square analysis of differences in the number of IPV incidents involving physical abuse across scale levels showed significant differences between scale levels (χ^2 (3, N=93) = 36.22, $p < .01$). Further pairwise comparisons revealed significantly more IPV incidents characterised by physical abuse in Scale 2 compared to Scale 1 (Scale 1x2: χ^2 (1, N=60) = 8.07, $p < .008$). Scale 3 was also found to have significantly more incidents of physical abuse compared to all other scales (Scale 1x3: χ^2 (1, N=42) = 33.6, $p < .008$; Scale 2x3: χ^2 (1, N=46) = 14.60, $p < .008$; Scale3x4 χ^2 (1, N=33) = 13.49, $p < .008$). Fisher's Exact Test statistic was used when more than 20% of cells had an expected count less than 5.

Table 9

Nature of IPV incident

Nature of IPV incident	Perpetrator	Scale 1 n (%)	Scale 2 n (%)	Scale 3 n (%)	Scale 4 n (%)	Totals n (%)
Verbal abuse	Male	16 (57.1%)	15 (46.9%)	1 (7.1%)	4 (21.1%)	37 (39.8%)**
	Female	0 (0%)	0 (0%)	0 (0%)	1 (5.3%)	
Threats to harm partner/child or self-harm	Male	1 (3.6%)	2 (6.3%)	0 (0%)	0 (0%)	4 (4.3%)
	Female	1 (3.6%)	0 (0%)	0 (0%)	0 (0%)	
Threats to kill or seriously harm partner/child	Male	0 (0%)	1 (3.1%)	1 (7.1%)	0 (0%)	2 (2.2%)
Intimidation	Male	0 (0%)	1 (3.1%)	0 (0%)	1 (5.3%)	2 (2.2%)
Destruction of property	Male	4 (14.3%)	3 (9.4%)	0 (0%)	0 (0%)	7 (7.5%)
	Male	0 (0%)	6 (18.8%)	11 (78.6%)	3 (15.8%)	
Physical assault	Female	0 (0%)	2 (6.3%)	0 (0%)	1 (5.3%)	24 (25.8%)
	Reciprocal	0 (0%)	0 (0%)	1 (7.1%)	0 (0%)	
Sexual Assault		0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
Harassment	Male	6 (21.4%)	1 (3.1%)	0 (0%)	6 (31.6%)	13 (14%)
Theft	Male	0 (0%)	1 (3.1%)	0 (0%)	1 (5.3%)	2 (2.2%)
Breach of Bail/Non-Molestation Order	Male	0 (0%)	0 (0%)	0 (0%)	2 (10.5%)	2 (2.2%)
Total n		28	32	14	19	93

* p < .05, **p < .01

Information regarding injuries sustained during IPV incidents was collected from the police database and is presented in Table 10. In terms of the male victims of IPV, it was noted that the only male victim in Scale 1 was not reported to have suffered any physical injuries, however, both of the two male victims in Scale 2 suffered slight injuries. Of the male victims in Scale 4 incidents, one suffered slight injuries while the other was not recorded to have sustained any physical injuries during the IPV incident. Both victims of the case of reciprocal violence

suffered slight physical injuries. Due to the small number of cases of male victims meaningful statistical analysis could not be performed on these cases.

When looking at injuries sustained by female victims, it was found that there were significant differences in whether a victim sustained physical injuries as a result of the IPV incident according to scale level (χ^2 (3, N=87) = 38.83, $p < .01$). Further pairwise comparisons revealed that Scale 3 females were significantly more likely to sustain physical injuries compared to all other scale levels (Scale 1x3: χ^2 (1, N=41) = 28.99, $p < .008$; Scale2x3: χ^2 (1, N=44) = 18.08, $p < .008$; Scale3x4 χ^2 (1, N=30) = 13.27, $p < .008$). Fisher's Exact Test statistic was used when more than 20% of cells had an expected count less than 5.

Table 10

Physical injuries sustained during IPV incident categorised by gender (N = 93)

Physical injuries sustained during IPV incident		Scale 1 n (%)	Scale 2 n (%)	Scale 3 n (%)	Scale 4 n (%)
Male	None	1 (3.5%)	0 (0%)	0 (0%)	1 (5.3%)
	Slight	0 (0%)	2 (6.3%)	1 (6.7%)	1 (5.3%)
	Serious	0 (0%)	0 (0%)	0 (0%)	0 (0%)
Female	None	27 (96.4%)	26 (81.3%)	3 (20.0%)	15 (78.9%)
	Slight	0 (0%)	4 (12.5%)	10 (66.7%)	2 (10.5%)
	Serious	0 (0%)	0 (0%)	1 (6.7%)	0 (0%)
Total n		28	32	15¹	19

¹ both victims were added to totals for case of reciprocal violence

iii) OFFENCE AND RISK DESCRIPTIONS OF CASES ASSIGNED TO THE FOUR SCALES

Risk factors collated in the MDVRITS were not recorded by professionals at multiagency screening meetings. Therefore, in order to assess the risk profiles of cases assigned to each scale at the time of the IPV incident the risk factors from the Spousal Assault Risk Assessment Guide (SARA-2nd Edition; Kropp et al., 1995) and the Danger Assessment Scale (Campbell, Webster, & Glass, 2009) were used as proxy measures. They were deemed appropriate as they have been reliably associated with risk of harm from an intimate partner (Campbell, Webster, & Glass, 2009; Kropp et al., 1995).

Description of risk factors.

Risk factor #1 investigated the alleged perpetrator's history of violence against strangers, acquaintances or ex-partners. This risk factor is a combined item of the SARA Item #2 -Past assault of Strangers or Acquaintances and Item #11- Past physical assault of victim. This item was amalgamated due to the constraints of the data available in the databases used in this study.

Risk factor #2 investigated whether alleged perpetrators had any past violations of Conditional Release or Community Supervision which relates to Item #3 on the SARA and risk Factor #3- Past violation of non-contact orders relates to Item #15 on the SARA.

Risk factor #4 relates to the number of past police callouts for IPV incidents between the victim and the alleged perpetrator. Past police callouts for IPV were averaged across the four scale levels to compare against scale levels while risk factor #5 investigated whether there were any reports of the alleged perpetrator experiencing recent or a history of mental health concerns or recent suicidal intent. This item is based on a combination of SARA Item #9- Recent Suicidal or Homicidal Intent and Item # 8- Recent Psychotic and or/Manic Symptoms and Question 16 on the DA: "Has he ever threatened or tried to commit suicide?" This amalgamation of these two

items was again done due to constraints in the available data held in the research databases.

Risk factor # 6 investigated whether the alleged perpetrator was experiencing any recent substance abuse or dependence. This item relates to Item #7 on the SARA -Recent Substance Abuse/Dependence within the last year and Question 11 and 12 on the DA “Does he use illegal drugs?” and “Is he an alcoholic or problem drinker?” Risk factor # 7- Recent separation relates to SARA item # 4- Recent Relationship Problems and Question 3 on the DA- “Have you left him after living together during the last year?” This item taps into whether there has been conflict between the victim and alleged perpetrator over their relationship status, and in particular, whether there has been a separation between the partners within the past year.

Risk factor #8 investigates the number of victims in each scale who sought medical attention for injuries sustained during the current offence. This is one component of the SARA item-Severe violence or sexual assault during current offence. Due to the fact that there were no incidents of sexual violence in the sample and the SARA defines severe violence as an incident in which the victim suffered serious physical injuries (ie. required medical attention) this definition was also utilised for this risk factor.

Risk factor # 9- Use of weapon during current offence represents one aspect of the SARA item #19 – Use of Weapons and or/Credible Threats of Death. Due to data constraints this risk factor only relates to the use of weapons during the incident. This item was coded following the SARA definition of weapon use. Therefore, this item was coded as present if during the IPV incident there was a “weapon” used that included a firearm, knife or any object used as a club to hit the victim. The final risk factor relates to whether the female in the IPV incident was pregnant at the time of the incident. This item relates to Question 15 on the DA: “Have you ever been beaten by him when you were pregnant?”

Overall, the results in Table 11 reveal some trends in the data but these did not reach statistical significance. It was noted that as scales increased, the frequency of each factor for Risk Factors 1, 2 and 4 were also noted to increase. This, however, did not hold true for risk factors relating to mental health concerns, substance use and recent separation which showed high levels across all scale levels. This finding, coupled with the results of the systematic review in Chapter 2, would suggest that these three factors are risk factors for IPV and CM generally, but their presence alone is not an accurate reflection of the severity of risk or scale level.

Analysis.

A one-way ANOVA was conducted on Risk Factor-4 and chi-square analyses were carried out on all other Risk Factors in the table. Few tests reached significance. The chi-square analysis for Risk Factor #8- Sought Medical attention showed significant differences between the four group levels (χ^2 (3, N=93) = 9.00, $p < .05$). Further pairwise comparisons revealed that Scale 3 had significantly more victims sought medical attention for injuries sustained during the IPV incident compared to Scale 1 (χ^2 (1, N=42) = 6.46, $p < .05$), however, this was not found to be statistically significant using the Bonferroni corrected alpha level of .008.

Another chi-square analysis for Risk Factor #10: Mother Currently Pregnant found that there was a significant differences between groups (χ^2 (3, N=93) = 13.63, $p < .01$). Further pairwise comparisons were not significant using the Bonferroni adjusted alpha level of .008.

Table 11

Risk profiles for each level at time of incident based on the Spousal Assault Risk Assessment and Danger Assessment items.

	<i>Risk factor #1</i> Past assaults of strangers, acquaintance, partner or ex- partner¹	<i>Risk factor #2</i> Past violation of Conditional Release or Community Supervision₁	<i>Risk factor #3</i> Past violations of No Contact Order¹	<i>Risk factor #4</i> Previous police callouts for IPV incidents (average)	<i>Risk factor #5</i> Recent or history of mental health concerns or recent suicidal intent^{1,2}	<i>Risk factor #6</i> Recent substance abuse or dependence^{1,2}	<i>Risk factor #7</i> Recent separation_{1,2}	<i>Risk factor #8</i> Sought medical attention for injuries sustained during current offence^{1*}	<i>Risk factor #9</i> Use of weapon during current offence¹	<i>Risk factor #10</i> Mother currently pregnant^{2**}
Scale 1	8 (29%)	3 (10%)	0	1 callout	8 (36%)	11 (41%)	16 (72%)	0 (0%)	0 (0%)	1 (4%)
Scale 2	10 (31%)	1 (3%)	0	2.5 callouts	10 (32%)	11 (36%)	20 (63%)	1 (3%)	1 (3%)	1 (3%)
Scale 3	6 (43%)	3 (21%)	0	3.8 callouts	4 (30%)	8 (61%)	7 (50%)	3 (21%)	1 (7%)	4 (29%)
Scale 4	10 (52%)	5 (26%)	1	6.6 callouts	4 (27%)	9 (53%)	12 (80%)	1 (5%)	0 (0%)	0 (0%)

¹ relates to item on the SARA

² relates to item on the DA

* p < .05, **p < .01

Figures 5 and 6 are bar charts which present the results relating to the percentage of IPV incidents in which the perpetrator was arrested and charged for an offence related to the IPV incident according to Scale level. It was noted that overall, the majority of Scale 1, Scale 2 and Scale 4 IPV incidents did not result in arrests or charges against the alleged perpetrator. It was, however, noted that 79% of Scale 3 incidents resulted in the arrest of the perpetrator, however, this only resulted in charges for 36% of the cases.

Statistical analyses revealed a significant difference between the number of arrests for Scale 3 incidents in comparison to Scale 1 and 2 incidents (Scale 1 x Scale 3: $\chi^2 (1, N=42) = 12.65, p<.008$; Scale 2 x Scale 3: $\chi^2 (1, N=46) = 8.79, p<.008$). These results were significant using a Bonferroni adjusted alpha level of .008. In terms of charges, there were no significant differences noted between the number of charges in relation to the IPV incident across the scale levels.

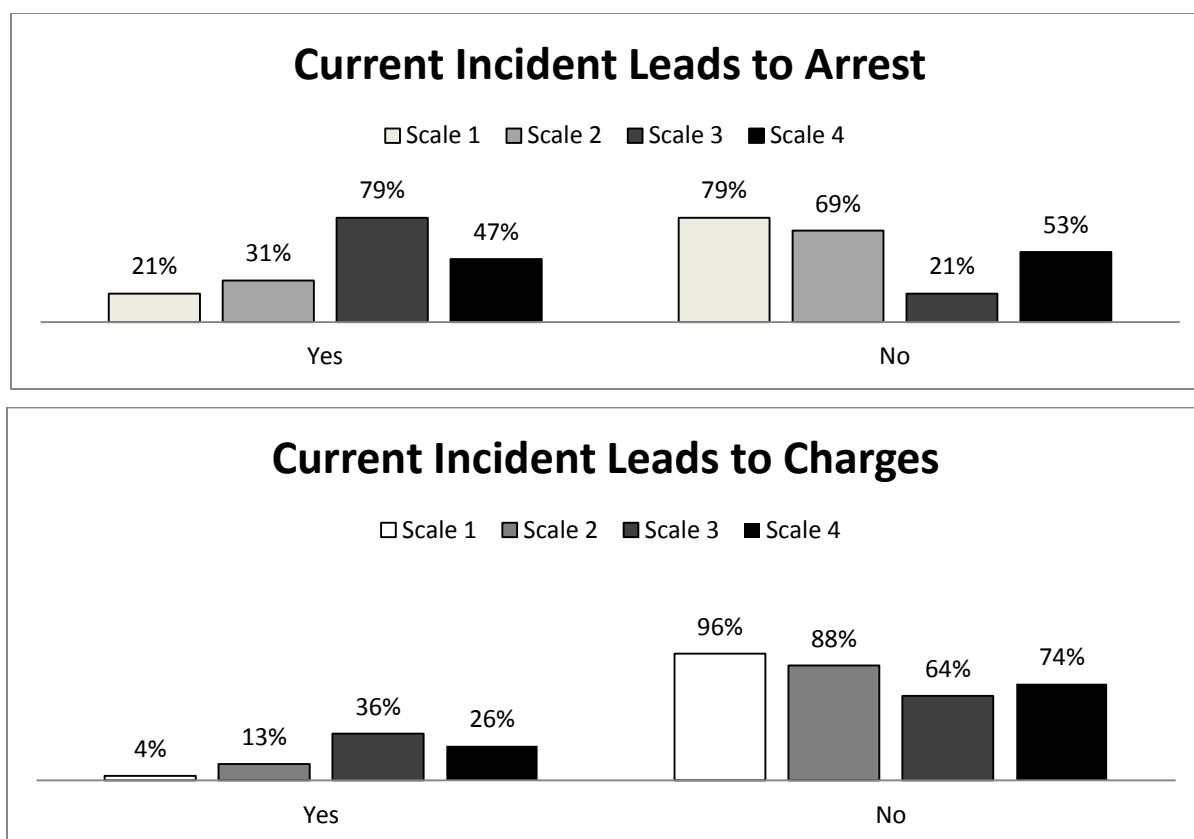


Figure 5 and Figure 6: Bar charts showing percentage of IPV incidents in the sample in which the perpetrator was arrested and charged with an offence relating to the IPV incident (N=93)

Data was collected regarding the number of victims who supported the prosecution of the alleged incident IPV perpetrators. Overall, 48% of the IPV victims in the sample supported the prosecution of the alleged perpetrator which involved either pursuing charges, cooperating with the police investigating the incident at the time of the offence, or reporting breaches of non-molestation orders or bail conditions to the police.

It was noted that the percentage of victims supporting prosecution of the alleged perpetrator increased with scale level. Scale 1 victims were the least likely to support prosecution (32%), followed by Scale 2 victims (44%), Scale 3 (50%) and Scale 4 victims were the most likely to support prosecution (58%) of the alleged perpetrator. Chi-square analyses revealed no significant differences between whether the victim supports prosecution when analysed

according to scale level.

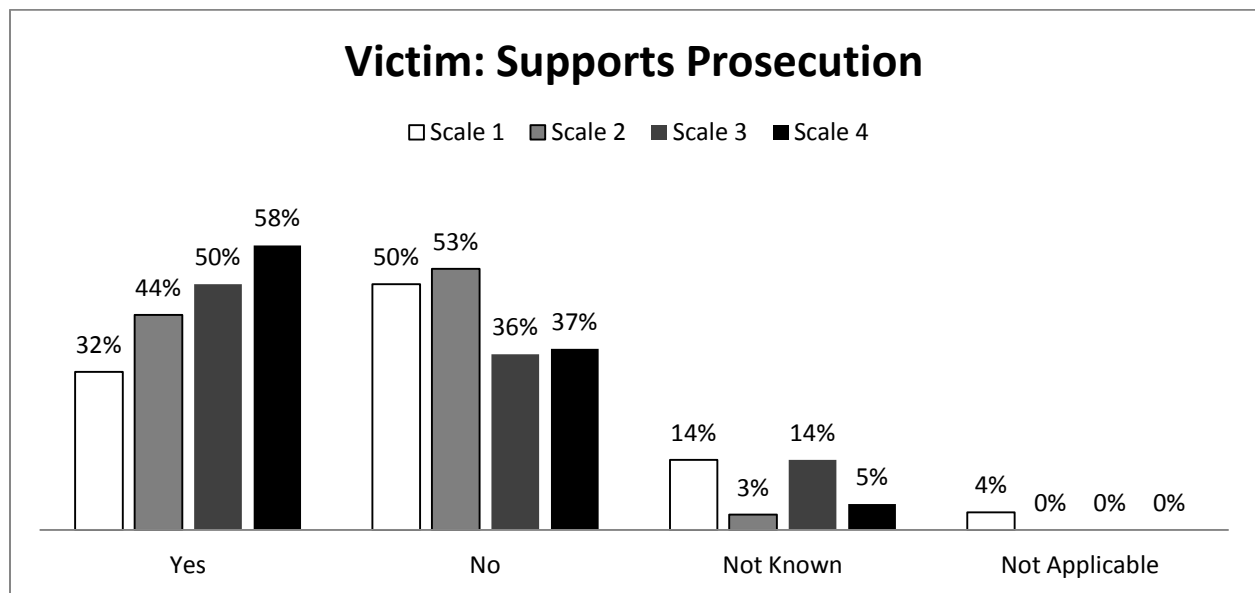


Figure 7: Bar chart showing percentage of incidents in which the victim supports the prosecution of the perpetrator of the IPV incident.

In addition, a correlation were carried out to identify the relationship between the DASH risk rating for the IPV incident and the MDVRITS risk rating for the same IPV incident. It was found that there was a modest positive correlation between the two variables ($r = .33$, $p < .01$).

Research Question 2: Investigate family outcomes for cases assigned to each of the four MDVRITS scales one year from baseline.

The follow-up data from each of the original 93 IPV incidents was analysed to give indications about the outcomes for the cases over a year follow-up period.

Description of items.

The first item in Table 12 relates to the number of police callouts for IPV incidents during the follow-up period. The number of callouts during the 12 month follow-up were averaged for each of the four scale levels and recorded. Any incidents of physical abuse during the one year follow-up period were also recorded for each of the cases. It was noted that there were additional incidents of physical abuse observed in all of the scale levels. Scale 1 cases had the fewest number of incidents of physical abuse (11%) during the year follow-up. Scale 2 and Scale 3 cases showed similar incidences of physical abuse during the year follow-up (22% and 21% respectively), while Scale 4 cases had the highest percentage of incidences of physical abuse during the year follow up with 7 incidents (37%).

Data pertaining to any breaches of parole orders, bail or non-molestation orders for the alleged perpetrators of the original IPV incident over the year follow-up period was also collected. There were no incidents of any breaches of any parole orders, bail orders or non-molestation orders for Scale 1, 2 and 3 cases over this period; however, there was at least one incident of a breach of a parole/bail/non-molestation order in four cases in Scale 4 which accounted for 37% of these cases.

Data regarding additional screenings for IPV incidents that took place between the victim and the alleged perpetrator during the year follow-up were also collected and analysed. It was noted that 36% of Scale 1 cases, 41% of Scale 2 cases, 7% of Scale 3 cases and 47% of Scale 4

cases had at least one additional screening during the year follow-up period. Overall, Scale 3 cases had the lowest number of additional screenings in the year follow-up compared to all other scale levels.

Of the cases in each scale that had additional screenings, it was also recorded whether any of these cases increased in scale level. It was noted that 90% of the additional screenings for Scale 1 cases increased to a Scale 2 or higher. It was found that 31% of the additional Scale 2 screenings were scaled at a level of Scale 3 or higher. Finally, of the one Scale 3 case in which there was an additional screening during the year follow-up, the level of risk for this case increased to a Scale 4.

Finally, information was also collected to determine the number of cases referred to a Multi-Agency Risk Assessment Conference (MARAC) during the year follow-up. It was noted that 4% of the Scale 1 and Scale 2 cases were each referred to MARAC during the year follow-up, this proportion increased to 15% for Scale 3 cases, and 11% of the Scale 4 cases were referred to MARAC during the year follow-up.

Analysis.

Statistical analyses were conducted on the data in Table 12. It was found that there was a significant difference between the number of breaches of parole/bail condition for Scale 4 alleged perpetrators compared to the other three scale levels ($F(3, 91) = 6.21, p < .01$). Regarding additional screenings during the year follow-up it was noted that Scale 3 had the fewest additional screenings of all the scales, however, statistically it was only found that significantly more Scale 1 cases had an increase in scale level at additional screening compared to Scale 2 ($\chi^2(1, N=22) = 7.25, p < .008$). A Fisher's Exact Test statistic was used in this analysis to compensate for low case size and a Bonferroni adjusted alpha of .008 was used. No other

significant differences were found.

Table 12
Outcomes for cases during 12 month follow-up

	Number of police callouts for IPV incidents over year follow-up (average)	Incidents of physical abuse during year follow- up	Incidents of breaches of parole/bail conditions or non- molestation order	Number of cases that had additional screening(s) during the year follow-up	Number of cases that had an increase in scale level at additional screening	Cases referred to MARAC during the year follow-up
Scale 1	.89	3 (11%)	0 (0%)	10 (36%)	9 (90%)	1 (4%)
Scale 2	1.1	7 (22%)	0 (0%)	13 (41%)	4 (33%)	1 (4%)
Scale 3	.6	3 (21%)	0 (0%)	1 (7%)	1 (100%)	2 (15%)
Scale 4	1.6	7 (37%)	4 (21%)	9 (47%)	N/A	2 (11%)

A closer analysis of the cases that had additional screenings was conducted. An exact breakdown of the number of additional screenings and any increases or decreases in scale levels are detailed in Table 13. In terms of the average number of additional screenings, Scale 1 cases had an average of 2.3 additional screenings, Scale 2 cases had an average of 1.6 and Scale 4 had an average of 1.4 additional screenings. There was only one Scale 3 case that had any additional screenings, and this case had two additional screenings during the year follow-up.

Exploring this further for each scale, it was noted that 90% of the Scale 1 cases increased in risk during subsequent follow-up screenings, while 10% remained Scale 1. In relation to Scale 2 cases, the majority of these cases (67%) remained a Scale 2 at additional screening, while 33% of the Scale 2 cases increased in risk. Only one Scale 3 case had any additional screenings during the follow-up period, however, this case did increase in risk to a Scale 4 during that time. Finally, the majority of Scale 4 cases (71%) remained Scale 4 at additional screenings, however, 29% of Scale 4 cases decreased in risk during subsequent re-screenings during the one year follow-up period.

Overall, these results suggest that the vast majority of Scale 1 cases that are re-screened during the follow-up period were found to increase in risk, and the vast majority of Scale 4 cases remained high risk at further screenings. Interestingly, this finding did not hold true for Scale 2 cases, which were most likely remain the same level of risk during re-screenings in the follow-up period.

Table 13:
Additional screenings during one year follow-up

	Original IPV incident Screening Scale Level	1st Additional Screening	2nd Additional Screening	3rd Additional Screening	4th Additional Screening
Case 1	Scale 1	Scale 1			
Case 2	Scale 1	Scale 2	Scale 2	Scale 1	
Case 3	Scale 1	Scale 1	Scale 2		
Case 4	Scale 1	Scale 1	Scale 2	Scale 2	Scale 2
Case 5	Scale 1	Scale 2	Scale 2	Scale 2	Scale 2
Case 6	Scale 1	Scale 2			
Case 7	Scale 1	Scale 2			
Case 8	Scale 1	Scale 4	Scale 4		
Case 9	Scale 1	Scale 2			
Case 10	Scale 1	Scale 2	Scale 4	Scale 4	
Case 11	Scale 2	Scale 4			
Case 12	Scale 2	Scale 2			
Case 13	Scale 2	Scale 1	Scale 3		
Case 14	Scale 2	Scale 2			
Case 15	Scale 2	Scale 2			
Case 16	Scale 2	Scale 3	Scale 4		
Case 17	Scale 2	Scale 2	Scale 2		
Case 18	Scale 2	Scale 2			
Case 19	Scale 2	Scale 4	Scale 2	Scale 2	
Case 20	Scale 2	Scale 2	Scale 2	Scale 2	
Case 21	Scale 2	Scale 2	Scale 2		
Case 22	Scale 2	Scale 2			
Case 23	Scale 3	Scale 4	Scale 4		
Case 24	Scale 4	Scale 4			
Case 25	Scale 4	Scale 4			
Case 26	Scale 4	Scale 4	Scale 1		
Case 27	Scale 4	Scale 2			
Case 28	Scale 4	Scale 4	Scale 4		
Case 29	Scale 4	Scale 4	Scale 4		
Case 30	Scale 4	Scale 4			

Table 14 presents demographic information and the risk profiles of the six Scale 1 and Scale 2 cases that escalated to a Scale 3 or 4 during the year follow-up period. It was decided that these risk profiles should be investigated further to ascertain whether there are any risk factors that could be identified to help detect which cases are most likely to increase in risk over time. It was noted that all six cases involved male perpetrators, and four of the six perpetrators were the biological parent to at least one child in the household. Of the six cases, two of the original incidents involved verbal abuse, two involved physical violence, and the final two were coded as harassment and theft.

Items from the SARA and DA were again used to provide a risk profile for each of the six incidents. Notably, a high proportion of cases (67%) had at least one conviction for a previous assault of a stranger, acquaintance, partner or ex-partner and had experienced a recent separation (100%). These findings would suggest that perpetrator history of violence and the presence of a recent separation in the relationship are good indicators of those IPV offenders who are likely to increase in risk over time.

Table 14

Demographic and Risk Profiles for the six individual Scale 1 and 2 cases which escalated in risk during the year follow-up period

	<i>Gender of Alleged Perpetrator</i>	<i>Nature of IPV incident at initial screening</i>	<i>Alleged perpetrator's relationship to child</i>	<i>Risk factor #1 Past assault of stranger, acquaintanc e partner or ex-partner</i>	<i>Risk factor#2 Past violation of Conditional Release or Community Supervision</i>	<i>Risk factor #3 Past violation s of No Contact Order</i>	<i>Risk factor #4 Previo us police callouts for IPV inciden ts</i>	<i>Risk factor #5 Recent or history of mental health concerns or recent suicidal intent *</i>	<i>Risk factor #6 Recent substance abuse or dependen ce</i>	<i>Risk factor #7 Recent separati on</i>	<i>Risk factor #8 Sought medical attention for injuries sustained during current Offence</i>	<i>Risk factor #9 Use of weapon during current offence</i>	<i>Risk factor # 10 Mother pregnan t</i>	<i>Risk factor # 11 Numb er of previo us convic tion</i>
Case 8	Male	Harassme nt	Non- biological parent/ex- partner	Yes	No	No	1 callout	Yes	No	Yes	No	No	Yes	10
Case 10	Male	Verbal abuse	Biological parent	Yes	Yes	No	2 callouts	Not known	No	Yes	No	No	No	23
Case 11	Male	Physical abuse	Biological parent	Yes	No	No	3 callouts	Yes	Yes	Yes	No	No	No	3
Case 13	Male	Theft	Biological parent	No	No	No	1 callout	Not known	No	Yes	No	No	No	0
Case 16	Male	Verbal abuse	Biological parent	Yes	No	No	2 callouts	No	Yes	Yes	No	No	No	1
Case 19	Male	Physical abuse	Non- biological parent/ex- partner	No	No	No	0 callouts	Not known	Yes	Yes	Yes	No	No	0
Total				66.7%	16.7%	0%	Averag e of 1.5 callouts	–	50%	100%	16.7%	0%	16.7%	6.2 (avera ge past convic tions)

Table 15 provides a comparison of the six cases which escalated in risk at additional screenings during the year follow up and the Scale 1 and 2 cases which did not escalate in risk. This was done as an attempt to identify risk factors that can help identify cases that may escalate in risk beforehand. Notably, differences in frequency were detected for i) past assaults of strangers, acquaintances partners or ex-partners, ii) mental health concerns, iii) recent substance abuse, iv) recent separation and v) number of previous convictions between the two groups.

Statistical analysis by means of chi-square analyses and t-tests were completed where meaningful numbers allowed as a way of identifying whether there were any significant differences between the two groups in relation to the eleven risk factors. It was found that there was a significant difference between the cases that escalated in risk over the year follow-up period and the cases that did not for Risk Factor 1- Past assault of a stranger, acquaintance, partner or ex-partner. More specifically, the perpetrators in the six cases which did escalate in risk over the follow-up period were significantly more likely to have at least one previous conviction for past assaults of strangers, acquaintances or ex-partners (χ^2 (1, N=60) = 4.82, $p < .05$). All other statistical comparisons of the remaining risk factors between the two groups were not found to be significant.

Table 15

A summary of the risk profiles of Scale 1 and Scale 2 cases that increased in risk to a Scale 3 or 4 during year follow-up period compared to Scale 1 and Scale 2 cases which did not escalate in risk during the follow-up period.

	<i>Risk factor #1</i> Past assault of stranger, acquaintance, partners or ex-partner*	<i>Risk factor #2</i> Past violation of Conditional Release or Community Supervision	<i>Risk factor #3</i> Past violations of No Contact Order	<i>Risk factor #4</i> Previous police callouts for IPV incidents	<i>Risk factor #5</i> Recent or history of mental health concerns or recent suicidal intent *	<i>Risk factor #6</i> Recent substance abuse or dependence	<i>Risk factor #7</i> Recent separation	<i>Risk factor #8</i> Sought medical attention for injuries sustained during current offence	<i>Risk factor #9</i> Use of weapon during current offence	<i>Risk factor #10</i> Mother pregnant or had baby in the last 18 months	<i>Risk factor #11</i> Number of previous convictions
Cases that did not escalate in risk at re-screening during follow-up n=54	13 (24%)	3(5.6%)	0 (0%)	Average of 1.9 callouts	15 (27.8%)	19 (35.2%)	30 (55.6%)	1 (1.8%)	1 (1.9%)	1 (1.9%)	Average of 2.4 previous convictions
Cases that escalated in risk to a Scale 3 or 4 at re-screening during follow-up n=6	4 (66.7%)	1 (16.7%)	0 (0%)	Average of 1.5 callouts	2(66.7%)	3 (50%)	6 (100%)	1 (16.7%)	0 (0%)	1 (16.7%)	Average of 6.2 previous convictions

* p < .05

Research Question 3: Investigate professional’s ability to consistently assign children to pre-determined risk levels.

Table 16

Inter-rater reliability of mock case screening level allocations at Time 1 and Time 2

	<u>Team 1</u>	<u>Team 2</u>
	Time 1 (Feb 2010)	Time 2 (September 2012)
Mock Case 1	Scale 3	Scale 3
Mock Case 2	Scale 4	Scale 4
Mock Case 3	Scale 1	Scale 2
Mock Case 4	Scale 2	Scale 3

During the focus groups, the Multi-agency Joint Screening team screened four mock cases that had been previously screened by a Joint Screening team in 2010 as a measure of test-retest reliability. The Joint Screening teams at Time 1 and Time 2 were comprised of four professionals from the same four agencies at both times, however, the professionals at Time 2 were not the same individuals who originally screened the case at Time 1. Overall, there was agreement between the Joint Screening Teams at Time 1 and Time 2 on 50% of the cases. In the 2 cases where there was not agreement between the Screening Teams there was a difference of one scale level on both occasions.

The team screened Mock Case 1 as a Scale 3 at both Time 1 and Time 2. Similarly, there was also agreement between the two teams for Mock Case 2, with both teams screening the incident as a Scale 4 at Time 1 and Time 2. In relation to Mock Case 3, there was not agreement between the screening levels at Time 1 and Time 2, with the team screening the case as a Scale 1 at Time 1 and Scale 2 at Time 2. Mock Case 4 was also scaled differently at Time 1 and Time 2. This incident was screened at a Scale 2 at Time 1, and a Scale 3 at Time 2.

For Mock Case 3 the Multi-agency Joint Screening team proposed a screening of Scale 2 based on the police officer’s observation that there was evidence of injury to the victim, that

there were two children present during the IPV incident the children were heard crying in the background of the phone call to the police, and that the victim did not support prosecution of the alleged perpetrator. The Joint Screening team weighed these risk factors against the protective factors that there were no records of previous callouts for IPV, that there was already adult safeguarding input from the police at the incident, and that the victim made the call to the police herself.

In Mock Case 4 the Joint Screening Team decided that the case would be screened at a Scale 3 because they had noted that the perpetrator had made a direct threat to kill one of the children, that he had access to a firearm, that there was a previous incident in which the alleged perpetrator had attended the family home with a weapon, and that the alleged perpetrator was deemed to be controlling towards the victim. This information was weighed against the identified protective factor that the children were of adolescent or adult age at the time of the incident.

Research Question 4: Investigate the perspectives of professionals attending the Joint Screening meeting from multiple disciplines about the procedure and delivery of the Joint Screening process.

In this section the findings of the Multi-agency Joint Screening team focus group are presented using qualitative description (Neergaard et al., 2009). The focus group was conducted to document the thoughts and feedback from multi-disciplinary professionals currently working in the Multi-agency Joint Screening team using the MDVRITS tool. In terms of structure, the professionals' responses to the questions during the focus group were organised into the strengths, weaknesses and ways of improving both the Joint Screening process and the MDVRITS tool itself. Each point is presented in turn and, where possible, common themes expressed by the professionals are highlighted.

1. In your opinion is the Joint Screening process useful?

All three professionals strongly felt that the Joint Screening process was very helpful. The positive outcomes cited by the professionals were themed around the Joint Screening process allowing for more streamlined professional practice and more positive outcomes regarding the safeguarding of children.

The professionals felt the strength of the Joint Screening Process lay in the multi-agency approach and increased information sharing, as it was previously reported agencies were working in "silos" and there was a lot of repetition of tasks between agencies before the Joint Screening process was introduced. It was, therefore, felt that the process was much more streamlined and, as such, reduces work load. The professionals felt that the process allows an informed decision to be made on whether that child is at risk which results in the best outcome for the child.

2. What is not so good about the Joint Screening Process?

Only two of the professionals were able to identify elements of the Joint Screening process that they felt did not run as well as it could. One of the drawbacks reported was related to the paper-based records currently used in Health. It was highlighted that having paper records means that collecting information about cases discussed in Joint Screening meetings means that practitioners such as Health Visitors and School Nurses have to be contacted on an individual basis for information about the child. This method was deemed to be resource intensive, and it was noted that this information can be difficult to gather during times when school nurses are more likely to be on leave, such as school holidays.

Another difficulty expressed by the professionals was regarding the commitment of the agencies to the Joint Screening Process. It was felt that when there are strategically led changes in any of the agencies, discontinuing the Multi-agency Joint Screening process is frequently discussed as a cost saving measure. It was felt that this causes uncertainty within the Joint Screening team. In addition, another difficulty expressed by some of the professionals was that consistent staff from each of the agencies has not always been allocated to the Joint Screening meetings in the past.

In addition, one of the professionals highlighted that they felt there was currently little oversight over the Joint Screening process, and felt that having somebody overseeing the process could ensure that the decisions being made were appropriate and that any inaccuracies can be picked up.

3. How could the process be improved?

The professionals all identified ways in which the Multi-agency Joint Screening process

could be improved. It was felt that the incorporation of education into the Joint Screening Process would help bring additional information about the child's wellbeing to the Screening Process. It was felt that, particularly for the school age children, school nurses only have health related information or know whether the child has been flagged as a concern, whereas a representative from the school would be able to provide more direct feedback from the school staff and could also be able to feedback to the schools regarding child safeguarding issues discussed during the Joint Screening meeting.

Another issue raised by one of the professionals was related to the need to ensure that all the professionals involved in Joint Screening have professional experience in the area of domestic violence and have some familiarity with the Joint Screening process and the MDVRITS tool itself.

Another area of development raised by one of the professionals was regarding the need for consistent sharing of information between professionals and agencies involved in the Joint Screening process. The need to have access to comprehensive information about the IPV incident being screened was also highlighted. It was felt that it is difficult for the professional to analyse risk when all the information held in the police incident forms was not available to them and therefore, they are not able to fully understand what the incident is about. It was also felt that the information about the incident needs to be available to the professionals before the Joint Screening meeting so that the professional is able to prepare beforehand.

4. Is the MDVRITS easy to adhere to?

All professionals were in agreement that the MDVRITS was easy to adhere to and easy to follow. In addition, all professionals were in agreement that the tool accurately places incidents in the correct scale and they found it easy to categorise cases according to the definitions of each

of the risk scales. They also felt that if two different professionals were to review the same case it would be very likely that they would assign the same risk level to the case using the MDVRITS scale.

The frequency with which the professionals used and referred to the tool was also highlighted. It was noted that the tool is particularly helpful for less experienced professionals, in that it provides a framework and guidelines for making risk decisions. However, the more experienced professionals felt that the tool was only directly referred to in more complicated cases when there was some ambiguity as to which scale the case should be assigned to.

5. What is not so good about it?

The professionals provided mixed opinions regarding the perceived weaknesses of the MDVRITS tool and there were mixed responses regarding some of the difficulties experienced when using the tool. The majority of the professionals identified the numbers of items on the tool was an area of concern due to the length of time it would take to check all the boxes and fill out the form as intended for each case. It was also noted that it was felt there were multiple factors duplicated in each scale. Therefore, the length of time it would take to complete the tool in its entirety for every case by using the tool to check all the boxes meant they felt they would be unable to complete all of their workload of screening assessments on time.

It was also highlighted by one of the professionals that differentiating between a Scale 2 and Scale 3 can be challenging as the professional felt there was a fine line between determining whether a case falls into a Scale 2 or Scale 3.

6. How could the MDVRITS be improved?

There was only one suggestion provided by the professionals regarding how the MDVRITS could be improved. It was suggested that adapting the tool to improve ease of use by the

professionals could be done by including, for example, a flow chart with factors such as a) “Was there violence during the incident? “Yes” b) Was a child present? “Yes” then go straight to Scale 3. It was suggested that this approach may be more helpful and efficient for the professionals involved in the Multi-agency Joint Screening.

Discussion

The aim of the current study was to investigate the demographics, offence and risk descriptions of the cases assigned to the MDVRITS scales, assess family outcomes over a year follow-up period, determine professionals' ability to correctly assign cases and to investigate the perspectives of the professionals using the MDVRITS. A summary of the findings for each of these research questions will be provided, followed by a discussion regarding the implications of these findings for organisational practice. A discussion of the limitations of the current study as well as suggestions for future research will also be discussed.

Research Question 1: Investigate/describe the demographics, offence descriptions and risk profiles of cases assigned to each of the four MDVRITS scales at baseline.

The collection of demographic data in this study gave an indication of the age, gender and ethnicities of the victims and alleged perpetrators in the sample. Overall, it was noted that the majority of incidents in the sample were perpetrated by males towards females, that both the alleged perpetrators and victims were most likely to be between the ages of 19 and 28, and the victims were most likely to be of White European ethnicity. In addition, it was noted that the alleged perpetrators in this sample were most likely to be the biological parent to at least one child in the household in Scale 2, Scale 3 and Scale 4 cases.

Some of these findings were found to mirror other recent statistics regarding IPV and victimisation. The 2011/2012 Crime Survey for England and Wales found that individuals between the age of 16 and 24 were most likely to have experienced one or more violent crimes during the previous year, followed by individuals between the ages of 25 and 34 (Office for National Statistics, 2012). In addition, this same report also identified that females were more likely than men to have experienced IPV during the previous year (Office for National Statistics, 2012).

Regarding the finding that the ethnicity of the victims was most likely to be White European, this may be a simple reflection of the ethnic make-up of the population in Birmingham South. Although specific population information was not available for all of the geographic areas within Birmingham South, it was found that Selly Oak and Edgbaston (major areas within Birmingham South) consisted of an ethnic makeup of 73.5% White, 14% Asian or Asian British, 6.5% Black or Black British and 4.8% multiple ethnicity (Office for National Statistics, 2013). These percentages generally mirror the findings in this study regarding the ethnicity of the victims of the IPV incident.

The finding that the vast majority of the IPV incidents in the sample were perpetrated by males towards females was interesting considering much of the current literature has consistently documented the finding that rates of perpetration of partner violence tend to be equal for both men and women (e.g., Archer, 2000). It may be the case that this finding reflects the reality of perpetration of IPV in Birmingham South, or there may be confounding variables that affected the classification of these incidents. For example, the forms and databases that police utilise when responding to an IPV incident require a victim and a perpetrator to be identified which most likely does not best capture incidents of reciprocal violence where individuals would fall into both the “perpetrator” and “victim” categories. This may result in police officers having to try to identify a “victim” based on other factors such as severity of injury. In addition, it may also be the case that decisions are affected by a lack of familiarity with the more recent IPV research and a reliance on the outdated, but widely held notion that only males perpetrate IPV against females which is likely to affect the decision making of professionals responding to incidents of IPV and the resulting classification of perpetrator and victim in these cases.

In terms of the nature of IPV incidents assigned to different scales, it was found that the

lower scales generally consisted of incidents characterised by less risk of physical harm. For example, Scale 1 incidents were frequently comprised of verbal abuse and destruction of property, whilst Scale 3 or 4 incidents most often involved physical assault or harassment. It was positive to note that all incidents in which there was physical abuse were screened as Scale 2 or higher at the initial screening. Scale 2 incidents involved physical abuse in 18% of the cases suggesting that a proportion of these Scale 2 incidents have considerable risk of physical harm and should be viewed and treated as such. As would be expected of higher risk Scale 3 incidents, there were a large proportion of cases that involved physical abuse as this is the scale level in which there is deemed to be enough concern about the child's wellbeing that Social Care open a formal investigation into the family.

Interestingly, Scale 4 cases presented as unique. Although some cases were characterised by serious incidents such as physical abuse and breach of bail, there were also a considerable amount of Scale 4 cases involving incidents that would be considered lower risk, such as verbal abuse. This dichotomisation of risk in Scale 4 incidents is likely due to the criteria for allocation to Scale 4 which dictates that any incident in which the perpetrator and/or victim has an open case in Social Care will be deemed a Scale 4, regardless of the risk or severity of the particular incident. It was also noted that, at the time of the IPV incident, perpetrators of Scale 4 incidents were most likely to be living outside the family home. This finding raises issues in terms of risk and safeguarding because if IPV incidents are continuing to take place after a period of voluntary or mandatory estrangement this would indicate serious risk of harm (Campbell, 1995, 2009).

The results from Research Question 1 also indicated that in terms of trends in the data (which did not reach statistical significance), the number of risk factors associated with IPV perpetration (Kropp et al, 1995) and risk of serious harm of IPV (Campbell, 1995, 2009) tended

to increase with scale level, demonstrating that professionals were appropriately assigning riskier cases to higher scales. All four scales showed somewhat consistently high rates of recent/history of mental health concerns or recent suicidal intent, as well as recent substance abuse and recent separation. These factors were frequently present in all cases across all scales rather than being good discriminators of more serious cases. Interestingly, these were some of the same risk factors highlighted in Chapter Two as being relevant in the identification of concurrent IPV and CM compared to only one form of family violence. When taken together, these findings provide a picture of many of the alleged perpetrators in this study as individuals with poor coping strategies who are likely to be living chaotic, stressful and disorganised lives.

These findings may have important implications for intervention. Developing a holistic approach to conceptualising IPV may prove worthwhile in the treatment of IPV perpetrators, as a means of not only addressing their risk factors specific to IPV, but also equipping them with improved coping skills and strategies to help manage stress and conflict in the future. For these reasons it may be of benefit for the Multi-agency Joint Screening Team to forge relationships with other services such as mental health and drug intervention teams so as to be able to make referrals in cases where they feel this is appropriate.

Research Question 2: Investigate family outcomes for cases assigned to each of the four MDVRITS scales one year from baseline.

The outcomes for cases assigned to each of the four scales during the year follow-up produced some interesting findings. It was noted that there was no significant differences between the scale levels in terms of police callouts for additional IPV incidents or incidents of physical abuse during the year follow-up period. Scale 4 cases were found to have significantly more incidents involving a breach of bail, parole or non-molestation orders during the follow-up period compared to the three other scales. This is likely to be an artefact of the nature of Scale 4

cases as, due to the severity of these cases, they are the most likely to have bail or non-molestation orders already activated. It does, however, raise issues about whether further support and safeguarding from professionals are needed in these cases because perpetrator contact or harassment has continued despite substantial interventions to prevent this from happening.

There were also some concerning findings noted regarding the number of additional Multi-agency Joint Screenings over the follow-up period. Over one third of Scale 1 and Scale 2 cases and almost one half of Scale 4 cases had additional screenings during the one year follow-up period. Of these re-screenings, 90% of Scale 1 and 33% of Scale 2 cases increased in risk during this period. These results support the similar findings from Research Question 1 that Scale 1 and Scale 2 cases have considerable risk and should be treated as such.

It was positive to note that very few Scale 3 cases had any additional screenings during the follow-up period. This finding may be due to the increase in involvement of services at a Scale 3 level, and suggests that for these cases, risk is being managed effectively during the following year. Of course it is possible that families at this scale are not being re-screened because the more intense involvement of professional services offered to the families at this scale prevents them from wanting to report further IPV incidents to the police. The answer to this question could only be determined through qualitative work with victims at the Scale 3 level to rule this out. However, the fact that Scale 4 cases also have intensive professional involvement, and some Scale 2 cases may also have some professional involvement (Birmingham Safeguarding Children Board , 2009) and no reduction in the number of cases being re-screened was noted for these scales suggests this is an unlikely explanation.

The demographics and risk profiles of the six Scale 1 and 2 cases that increased in risk during the follow-up period were investigated as a way of identifying any unique risk factors for

this group which may facilitate the identification of cases likely to increase in risk over time. Past assaults were found to be significantly higher in cases that increased in risk over time and non-significant trends in the data also revealed that mental health concerns, recent substance misuse, separation and number of previous convictions were all noted to be higher in cases that increased in risk over the follow-up period for all scales. These findings suggest that these factors may be particularly important factors to consider when assigning children to scale levels. These five factors are all included in the MDVRITS as being indicative of Scale 3 or higher, however, these risk factors were noted to be present in a proportion of Scale 1 and Scale 2 incidents in this study. It is crucial that risk factors such as these be identified and considered by the Multi-agency Joint Screening Team when screening cases, not only to ensure an accurate assessment of risk, but also to ensure that valuable resources are targeted towards the most complex and high risk cases. Overall, this finding suggests that these key risk factors may not be being identified by the Multi-Agency Joint Screening team in some cases and highlights the need for the team to consistently be utilising and referring to an evidence-based tool that focuses on the current literature to help guide their decisions regarding risk.

Research Question 3: Investigate professionals' ability to consistently assign children to pre-determined risk levels.

The results from inter-rater reliability mock screenings with the Multi-agency Joint Screening Team were mixed. The Joint Screening Teams at Time 1 and Time 2 both screened Mock Cases 1 and 2 as a Scale 3 and Scale 4 respectively. Mock cases 3 and 4 were, however, screened at different levels at Time 1 and Time 2 which resulted in a 50% consistency for inter-rater reliability.

While it is positive that the Joint Screening Team consistently allocated the more serious

Scale 3 and Scale 4 incidents, both Scale 1 and Scale 2 mock screenings were scaled at one scale higher by the Joint Screening Team at Time 2. This finding is concerning when combined with the previous finding that over a third of Scale 1 and Scale 2 cases had additional screenings during the year follow-up period, and of these additional screenings, 90% of Scale 1 and 33% of Scale 2 cases increased in risk over the follow-up period. This again highlights that Scale 1 and Scale 2 need to be considered and reviewed carefully by the Multi-agency Joint Screening Team, as not only was there inconsistency in allocating these cases correctly, but these cases are consistently having to be re-screened and are consistently increasing in risk over time. It is therefore, important that again, Scale 1 and Scale 2 not be considered “no risk” and that the criteria for allocating Scale 2 and Scale 3 cases be further clarified.

Research Question 4: Investigate the perspectives of professionals attending the Joint Screening meetings from multiple disciplines about the procedure and delivery of the Joint screening process.

In terms of the key points expressed by professionals during the focus group meeting, there was an agreement between all professionals that the Multi-agency Joint Screening process was very helpful. In addition, they reported that the process avoided repetition of tasks between agencies and, as a result, the process was more streamlined and reduced work load across agencies.

In terms of aspects of the Joint Screening Process that did not work well it was reported that having paper records in Health meant that collecting information about cases discussed in Joint Screening meetings was deemed to be resource intensive. In addition, it was felt there was inconsistent commitment from the different agencies towards the Joint Screening Process.

It was felt the process could be improved by the incorporation of a representative from education and by ensuring that all professionals involved in Joint Screening meetings have professional experience in the area of domestic violence and have some familiarity with the Joint Screening process and the MDVRITS tool itself.

In regards to the screening tool itself, it was felt that the MDVRITS was easy to adhere to and easy to follow. In addition, all professionals were in agreement that they felt the tool accurately places incidents in the correct scale and they found it easy to categorise cases according to the definitions of each of the risk scales. They also felt that if two different professionals were to review the same case it would be very likely that they would assign the same risk level to the case using the MDVRITS scale.

Although the professionals interviewed reported that they felt that the tool was easy to adhere to and that professionals reviewing the same case would be very likely to assign the same risk level, this was not evidenced in the findings of the inter-rater reliability mock screenings where only 50% of the cases were screened at the same scale at Time 1 and Time 2. Achieving high levels of inter-rater reliability is essential in ensuring that risk decisions are consistent across teams and geographical areas and also as a means of ensuring that children who are at risk are being reliably and consistently identified by the Joint Screening teams. This study employed a small scale test of inter-rater reliability for one Multi-agency Joint Screening team; however, it would be beneficial for a future study to investigate inter-rater reliability across all Birmingham Joint Screening Teams using a larger number of cases to create a more detailed picture regarding test-retest reliability.

In terms of the drawbacks of the MDVRITS tool the more experienced professionals felt that the tool was only referred to directly in more complicated cases when there was some ambiguity

as to which scale the case should be assigned to. In addition, the majority of the professionals identified the numbers of items on the tool was an area of concern due to the length of time it would take check all the boxes and fill out the tool as intended and it was felt there were multiple factors duplicated in each scale. It was also proposed that the team felt differentiating between a Scale 2 and Scale 3 can be challenging, as the professional felt there was a fine line between determining whether a case falls into a Scale 2 or 3. Indeed, this was evidenced in the mock screening scenarios when one of the cases was scaled as a Scale 2 at Time 1 and a Scale 3 at Time 2. This exercise also identified that there may also be some ambiguity between allocating Scale 1 and Scale 2 cases as there was some inconsistency noted between the screenings at Time 1 and 2 for this scenario too.

One suggestion was provided for adapting the MDVRITS tool to allow for ease of use by the professionals. It was proposed that the use of a flow chart with factors such as a) “Was there violence during the incident? “Yes” b) Was a child present? “Yes” then go straight to Scale 3 would be a helpful addition to the tool.

While it would appear that, overall, the Joint Screening Process is a helpful process for all the agencies involved there were also some concerns identified. Firstly, it would appear that the tool itself is not being directly referred to on a consistent basis, but only in more ambiguous cases. It was reported that this is due to the length of time it would take to complete the tool in its entirety for each case which involves ticking a Y/N/S box for each item in the “Evidence of DV,” “Risk factors/Potential Vulnerabilities” and “Protective Factors” sections for each scale level.

Unfortunately, by not directly using the tool for each case the decisions made by the Joint Screening Team are based on clinical judgement and, while their experience and knowledge are likely to ensure that these decisions are consistent and accurate much of the time, they are not

directly evidence-based or defensible. When making such important decisions regarding risk of harm to the child, fidelity to the tool is extremely important and is a way of ensuring that inter-rater reliability remains at an acceptable level.

Limitations

While all efforts were made during the planning stage of this study to ensure the study was as free from bias as possible, it must be highlighted that there were limitations in this study that must be considered.

Difficulty accessing records was encountered when collecting data from the Multi-Agency Joint Screening database. The screening database is made up of two files that contain information about IPV incidents that took place in Birmingham South. It was found that, potentially due to inputting inconsistencies, some of the screened incidents did not have records in both files, and therefore, could not be used in the study which resulted in a smaller sample size than originally anticipated. The cases included in the study were the cases that had records in both files held in the Multi-Agency Screening office, which means that random sampling could not be used to select cases and, therefore, the potential for selection bias could not be controlled for in this study.

Difficulties were encountered when collecting data in the West Midlands Police databases, including locating required data amongst the enormous wealth of information held across four different databases which proved to be a time consuming and labour intensive process. In addition, in some cases, the DASH screening tool was not completed with the victim after the IPV incident was reported. The DASH tool provides a wealth of information about the incident, the perpetrator, and the victim (for example, the level of fear the victim is experiencing, whether the perpetrator is experiencing substance use issues, or whether the perpetrator is

experiencing financial problems) that is not normally recorded in other police reports. Therefore, for the cases where the DASH risk assessments were accessible there was a wealth of valuable information while there was considerably less information available for those who did not complete the tool resulting in an inconsistency of data available for cases across this study.

Due to constraints of being able to consistently access the Police National Computer, information about alleged perpetrators' previous convictions and convictions during the year follow-up was only completed on the databases covering the West Midlands area. Although the West Midlands Police covers a significant geographical area, it is possible that alleged perpetrators could have offended in other parts of the county previously or during the follow-up period which would not have been recorded in the West Midlands Police database.

Another limitation of this study was that some of the information collected was based on self-report from the victim shortly after the IPV incident took place. Due to the stress of experiencing an IPV incident, coupled with potential concerns about professional involvement in the case, or fear of repercussions from the alleged perpetrator for disclosing information to the police, it is unclear how reliable this self-reported information may be. For this reason, when possible, information was used from multiple sources and various agencies to try to collate the most reliable information for each case.

Although inter-rater reliability was measured on a small scale in this study to determine the consistency with which one Multi-agency Joint Screening Team was allocating mock cases at two different points, this method did not actually measure the accuracy with which the team was allocating these cases as set out by the MDVRITS scale level criteria. It would be helpful for future studies to utilise a prospective methodological approach to investigate this more specifically as a way of determining the accuracy with which the Multi-agency Joint Screening

Team are adhering to the MDVRITS tool, but also to more specifically determine the outcomes of cases assigned to each of the MDVRITS risk scales once it is determined that they have reliably been allocated to a risk scale.

Overall, while this study was ambitious in terms of the number of research questions investigated, it should be remembered that this study only had a sample size of 93 cases which was divided even further across the four scale levels. Due to these small sample sizes, particularly Scale 3 and Scale 4 cases, statistical analysis was difficult to undertake and drawing conclusions from the analyses performed was also challenging. Therefore, as always, caution should be used when drawing general conclusions from such a small sample.

Overall Conclusions

To summarise the main findings of this study, on the whole, it was found that the Multi-agency Joint Screening Team are assigning cases with a higher number of IPV risk factors to higher and appropriate level scales. When looking across each of these scales, it was noted that all scales have risk at some level, and in particular, re-screened Scale 1 and Scale 2 cases were often found to increase in risk over time. Currently, cases allocated to Scale 1 and Scale 2 have little further involvement from professionals after the IPV incident, however, it may be worth considering the implementation of increased support and intervention at lower scale levels as a way of more effectively managing this risk.

Promising findings were noted in relation to the current management of Scale 3 cases, as very few of these cases were noted to have any additional reported IPV incidents during the follow-up period. There does, however, continue to be room for improvement in the way that Scale 1 and Scale 2 cases are managed. Closer inspection of re-screened cases at Scale 1 and

Scale 2 revealed that cases with the risk factors of perpetrator mental health concerns, recent substance misuse, past violence or recent separation were re-screened more frequently.

According to the MDVRITS, cases involving any of these risk factors should be allocated as Scale 3 or Scale 4, but it was identified that many of the Scale 1 and Scale 2 cases had one or more of these risk factors. This finding has stressed the need for professionals to consistently refer to the MDVRITS tool when allocating risk, particularly in relation to these specific risk factors.

It is also important that each screening is not considered a final, stand alone assessment and that any cases that return for re-screening as a result of additional IPV incidents build on the assessment of risk that was completed previously. For example, a case that is originally screened as a Scale 2 should not be then screened as Scale 1 for an additional incident, simply because the second incident involved a lower level of abuse. Instead, any further IPV incidents should be viewed as part of a bigger picture of an emerging pattern of violence. This will also ensure that dynamic factors which, by their very nature are liable to fluctuations and changes over time can be reviewed and their relevance can be considered by the team during any future re-screenings.

The results of this study provoke thought about the current use of the MDVRITS tool. Based on the feedback from the Multi-agency Joint Screening professionals, it appears that the tool is particularly helpful for professionals who are new to the screening process or when there is some debate about the allocation of a particular case among the professionals. At present, it would appear that the tool is being used as discussion guide for more complex cases rather than a tool that is consistently being utilised to make evidence-based and defensible decisions.

In addition, another issue identified in the study relates to the extent to which the tool is accurately measuring risk to the child. One of the difficulties encountered by the Joint Screening

Team is that there appears to be limited information available to them that relates directly to the wellbeing of the child, and as a result, it seems that what is actually being measured is the child's risk by-proxy of the risk to the adult victim. One way to address this would be to include a representative from education who would be able to provide valuable information and insight into the behaviour and well-being of the child which is not consistently available to the Multi-agency Joint Screening Team currently. Moreover, access to GP information or hospital records relating to the physical and emotional health and well-being of the child might also provide valuable information on which the Multi-agency Joint Screening Team can base their decisions.

The MDVRTS tool focuses on assessing severity of risk to families where IPV is present, however, given the overlap between IPV and CM in the literature it may be worth considering the provision of additional training to raise the awareness of the Multi-agency Joint Screening staff as a way of encouraging and empowering them to identify cases where both forms of violence may exist, or may have the potential to exist in the family home. Moreover, the creation of a child-centred tool that is able to screen for both risk from exposure to IPV in the household as well as risk of child maltreatment has the potential to streamline services and multi-agency working by identifying and intervening with children and families who are at the highest risk of experiencing both IPV and CM in the family home.

Implications for Future Research

This research has aimed to outline the feasibility of running a large scale study investigating the validity and reliability of the MDVRITS in the future. This study has highlighted and documented difficulties encountered, in particular, the complexities and challenges involved in the extensive process of gaining ethical clearance from multiple agencies to commence this study, the difficulties of identifying and selecting cases, and the challenges of collecting data in

various databases across multiple agencies. In order to answer more specific questions regarding the reliability and validity of the MDVRITS in the future, a prospective study design is necessary to ensure the data needed to investigate these questions is recorded consistently and is accessible to the researchers. In particular, it is crucial that the MDVRITS tool itself is consistently utilised and filled out by the Multi-agency Joint Screening Team for each case. This involves ticking all the relevant boxes on the tool for each factor to ensure that there is data available to investigate the tool in more detail in the future.

Overall, this study has demonstrated the effectiveness of multi-agency work, particularly in relation to the intervention and management of Scale 3 cases. This finding further demonstrates the necessity of joined up working to prevent future or more serious incidents of family violence and demonstrates that early intervention is key. Ultimately, if more resources can be directed towards supporting Scale 1 and Scale 2 cases, rather than taken away, it may be an important step towards increasing the efficacy of this screening process and the safeguarding of children in the West Midlands region.

CHAPTER FIVE

Discussion

The aim of this thesis was to further psychological understanding regarding the overlap of IPV and CM. Risk factors for IPV, CM and concurrent violence were reviewed, and risk assessments tools for assessing these form of violence were also evaluated.

Summary of Thesis Findings

The examination of the overlap between IPV and CM commenced with a systematic review of the empirical literature regarding the risk profiles of individuals who perpetrated both IPV and CM compared to individuals who perpetrated only one form of family violence. The review found that the perpetrator risk factors of increased substance use, mental health difficulties, perpetrator aggression/violence outside the household, childhood victimisation by a parent and lower levels of education were all significantly more prevalent in perpetrators of concurrent violence (Coohey, 2004; Dixon et al., 2007; Hartley, 2002; Slep and O'Leary, 2009; Tajima, 2004).

Specific differences in risk factors between concurrent abuse and CM-only perpetrators and concurrent perpetrators and IPV-only perpetrators were also compared. Although there were only a limited number of studies investigating these groups specifically, some consistent differences between the groups were noted across studies. Concurrent perpetrators were found to have higher incidences of perpetrator alcohol and substance use, higher levels of parenting stress, more mental health issues and more relationship difficulties compared to CM-only families (Beeman, Hagemester, & Edleson, 2001; Dixon et al., 2007; Levesque, Clement, & Chamberland, 2007; Tajima, 2004). The only consistent finding across the studies investigating concurrent and IPV-only perpetrators was that perpetrators of concurrent abuse had lower levels

of education compared to IPV-only perpetrators (Levesque, Clement, & Chamberland, 2007; Tajima, 2004).

The review also explored whether there were differences in risk factors for male and female perpetrators of concurrent IPV and CM and it was found that there were indeed gender differences. It was noted that men were more likely to have allegations of sexual or physical abuse made against them and were more likely to perpetrate concurrent abuse, whereas women were more likely to have allegations of neglect (Beeman et al., 2001; Dixon et al., 2007). In terms of specific risk factors, male perpetrators of concurrent abuse had more factors associated with an anti-social or criminal lifestyle, childhood victimisation, anger expression and more negative life events compared to female perpetrators of co-occurring family violence (Dixon et al., 2007; Levesque, Clement, & Chamberland, 2007; Tajima, 2004). On the other hand, women perpetrating concurrent IPV and CM were more likely to have health problems, feelings of isolation, less education, higher levels of parenting stress, were more likely to rate their own mother as being critical and were more likely to have been physically abused by their own mother as a child (Coohey, 2004; Dixon et al., 2007; Levesque, Clement, & Chamberland, 2007).

Overall, the findings from this review supported the hypothesis that perpetrators of concurrent family violence are not qualitatively different from families in which CM or IPV-only occur, they simply differ in severity. This finding has important implications for practice as it would indicate that because they have similar risk factors, concurrently violent individuals are likely to benefit from the same treatment interventions as perpetrators of IPV-only and CM-only violence, however, they are likely to need more intensive, long-term treatment due to the severity of these risk factors.

When conducting the review there were limitations encountered that affected not only the review, but the wider literature relating to co-occurring IPV and CM. One of the main limitations in this field relates to the lack of consensus in the literature regarding definitions of CM and IPV and how these are operationalised across studies which is likely to account for the lack of consistent findings. In order for the quality and quantity of studies in this area to increase it will be important to standardise how IPV and CM are defined, coded and operationalised across studies in the future.

In Chapter Three a critique of the Danger Assessment (Campbell, Webster, & Glass, 2009) was presented to provide an overview of an IPV risk assessment tool and the risk factors identified as being important in identifying cases where IPV is likely to escalate or where IPH is likely to occur. In addition, the purpose of this review was to determine the quality of the tool and the extent to which the DA was a valid and reliable risk assessment tool for determining risk of IPV or IPH.

Within this chapter an overview of the development of the tool was provided, as well as a discussion regarding the validity and reliability of the tool, and its corresponding strengths and limitations. It was established that the literature to date provides generally promising findings in terms of the DA's validity and reliability, sensitivity, and specificity. However, it was also determined that the vast majority of the available research has been conducted on the original DA and little research had investigated the more recent revised DA, therefore, further investigation of the revised DA is warranted. In addition, it was also highlighted that the validation of the DA for international use would be helpful in determining its suitability for use in countries such as the U.K.

Overall, the original Danger Assessment, and increasingly the revised DA, has amassed

considerable literature to suggest that it is a valuable tool, albeit not a foolproof one, for predicting risk of repeat IPV and IPH. Crucially, the Danger Assessment, like other risk assessment tools, should be considered a process, not a product to be used in isolation. Campbell (1995) reminds us that risk assessment should consist of two parallel processes- a brief re-offending risk assessment and a safety planning process carried out in collaboration with victims so that plans can be implemented to better ensure victim safety.

Following the critique of the Danger Assessment an empirical research study was presented in Chapter Four. This study aimed to evaluate the Multi-agency Joint Screening process and the use of the MDVRITS within this process. This was done by investigating the demographics, offence and risk descriptions of the cases assigned to the MDVRITS scales, assessing family outcomes over a year follow-up period, determining professionals' ability to correctly assign cases and by investigating the perspectives of the professionals using the MDVRITS.

Key findings from this study were that, overall, the Multi-agency Joint Screening Team were assigning cases with a higher number of risk factors to higher and appropriate level scales. The current management of Scale 3 cases was found to be particularly positive, as few of these cases were noted to have any additional reported IPV incidents during the follow-up period. Importantly, it was noted that all scales have risk at some level, and in particular, a proportion of re-screened Scale 1 and Scale 2 cases were found to increase in risk over time, highlighting the potential to address the way that Scale 1 and Scale 2 cases are currently managed by the Multi-agency Joint Screening Team. Scale 1 and Scale 2 revealed that cases with the risk factors of perpetrator mental health concerns, recent substance misuse, past violence or recent separation were re-screened more frequently. According to the MDVRITS, cases involving any of these risk

factors should be allocated as Scale 3 or Scale 4, but it was identified that many of the Scale 1 and Scale 2 cases had one or more of these risk factors. These findings, coupled with the results of the mock screening exercise, highlighted the need for professionals to consistently refer to the MDVRITS tool when allocating risk.

The finding that Scale 1 and Scale 2 cases that increased in risk over time were found to have increased perpetrator mental health concerns, recent substance misuse, past violence, and recent separation is of particular interest. Not only do these findings indicate that the alleged perpetrators in the sample tend to be individuals with poor coping strategies who are likely to be living chaotic, stressful and disorganised lives, but they also corroborate the international empirical findings reviewed in Chapter Two which have identified these risk factors as being more prevalent in perpetrators of both forms of violence compared to IPV-only or CM-only perpetrators.

In terms of the MDVRITS tool itself, it was acknowledged that the tool is currently being used as discussion guide for more complex cases rather than a tool that is being used to make evidence-based and defensible decisions. In addition, the observation that there was little information directly relating to the child's well-being on the MDVRITS was made, and the tool's resulting ability to accurately assess a child's risk was also discussed. In terms of the MDVRITS process, the resulting multi-disciplinary approach to risk assessment currently being used in the West Midlands shows a positive example of inter-agency collaboration between adult and child services. This process has demonstrated generally positive results and is a promising start to trying to understand violence within the context of the family unit, and the effect that this violence has upon various members of the family, including the children.

One of the noted limitations of this study, and of this thesis generally, is the lack of

identification and exploration of perpetrator attitudes, beliefs and cultural factors that are identified in Heise's macrosystem level. These factors and their corresponding relationship with the perpetration of IPV were not well explored within this study due to much of the available perpetrator data being provided by second hand sources as well as limited access to perpetrator police interviews. Heise (1998) identifies that these factors represent the broad set of cultural values and beliefs that inform the other three layers of the ecological framework, which would suggest they play an important role in fully understanding the risk of IPV perpetration. For this reason, where possible, future studies should aim to investigate the role of perpetrator attitudes, beliefs and cultural influences in an attempt to better understand the interplay of risk factors at all levels of Heise's framework.

Contributions to Current Literature and Practice

On a broader scale, progress has undoubtedly been made in the shift towards adopting a multi-disciplinary approach to the risk assessment of family violence in large part due to the implementation of policy frameworks such as "Working Together," Family Common Assessment Framework and the Multi-agency Joint Screening teams, however, it is felt that progress can continue to be made in terms of joint working. It is evident from the results of both the systematic literature review in Chapter Two, and the empirical paper in Chapter Four, that the perpetrators of family violence often have accompanying issues relating to substance use, mental health, early negative life experiences and recent separation. This, therefore, highlights the need for practitioners to be trained to be aware of these specific risk factors as well as the role that these factors play in increasing the risk of IPV and CM for both the victim and the child. In addition, these findings also stress the need to develop an integrated approach to addressing family violence, and effective interventions for family violence that incorporate the need to

address the range of risk factors relating to family violence. A way of doing this would be to ensure that agencies working with families where violence is present have strong ties with mental health and drug intervention teams so as to be able to make referrals in cases where they feel this may be appropriate.

The need for the adoption of a holistic approach to family violence has been a common theme throughout this thesis. There continues to be a considerable need for professionals to approach IPV, not an isolated problem, but rather a dynamic family issue. In these cases a holistic approach to the assessment of violent dynamics is required, rather than continuing to adopt an isolated view of IPV which likely serves to fragment understanding and the assessment of family dynamics as a whole (Dixon & Graham-Kevan, 2011). The first step in being able to achieve this is undoubtedly the creation of an ecological framework that incorporates the growing body of literature identifying risk factors for the perpetration of concurrent IPV and CM, but also stresses the interaction of risk factors at various levels that contribute to the perpetration of both forms of family violence. This integrated approach will undoubtedly be helpful in informing the design of prevention and treatment programmes for both men and women who perpetrate both forms of abuse, as well as informing more accurate risk assessments specific to concurrent violence as there are currently no standardised assessments for assessing families for concurrent victimisation (Dixon, Hamilton-Giachritsis, Browne, & Ostapuik, 2007). Future research based on analysing the literature regarding the risk factors for concurrent family violence, and developing a tool around this literature is key in helping to identify families where concurrent CM and IPV is present, or is likely to develop.

References

- American Psychological Association Presidential Task Force. (1996). *Violence and the Family*. Washington, DC: American Psychological Association Press.
- Appel, A. & Holden, G. W. (1998). The co-occurrence of spouse and physical child abuse: A review and appraisal. *Journal of Family Psychology*, 12, 578-599.
- Archer, J. (2000). Sex differences in physically aggressive acts between heterosexual partners: A meta-analytic review. *Psychological Bulletin*, 126, 651-680.
- Beeman, S., Hagemester, A. & Edleson, J. (2001). Case Assessment and Service Receipt in Families Experiencing Both Child Maltreatment and Woman Battering. *Journal of Interpersonal Violence*, 16, 437-458.
- Bell, M. (2007). *London Safeguarding Children Board*. Retrieved November 1, 2013, from Risk Assessment Matrix: www.londonscb.gov.uk/files/
- Bell, M. (2009). *Domestic Violence and the Risk it Poses for Children and Young People. Increase Knowledge Regarding Identification, Assessment and Disclosure*. Barnardo's: Northern Ireland.
- Belsky, J. (1980). Child maltreatment: An ecological integration. *American Psychologist*, 35, 320-335.
- Birmingham Safeguarding Children Board. (2009). *Multi-Agency Screening Tool*. Birmingham: Birmingham Safeguarding Children Board.
- Brandon, M. & Lewis, A. (1996). Significant harm and children's experiences of domestic violence. *Child and Family Social Work*, 1, 33-42.
- Browne, K. & Herbert, M. (1997). *Preventing Family Violence*. Chichester: Wiley & Sons.

- Calder, M. (2008). *Evaluation of Domestic Violence Training and Mentoring Programme in Northern Ireland: Mid-point summary analysis*. Leigh: Calder Training and Consultancy.
- Campbell, J.C. (1981). Misogyny and Homicide of Women. *Advances in Nursing*, 3, 67-85.
- Campbell, J.C. (1986). Nursing assessment for risk of homicide with battered women. *Advances in Nursing Science*, 8, 36-51.
- Campbell, J.C. (1995). Assessing dangerousness. Newbury Park, CA: Sage.
- Campbell, J.C. (2002). Health consequences of intimate partner violence. *The Lancet*, 359, 1331-1336.
- Campbell, J.C. (2007). *Assessing Dangerousness of Violence by Batterers and Child Abusers*. New York: Springer Publishing Company.
- Campbell, J.C., Webster, D. W. & Glass, N. (2009). The Danger Assessment. Validation of a Lethality Risk Assessment Instrument for Intimate Partner Femicide. *Journal of Interpersonal Violence*, 24, 653-674.
- Campbell, J.C., Webster, D., Koziol-McLain, J., Block, C., Campbell, D., Curry, M., et al. (2003). Assessing Risk Factors for Intimate Partner Homicide. *NIJ Journal*, 250, 15-19.
- Campbell, J.C., Webster, D., Koziol-McLain, J., Block, C., Campbell, D., Curry, M., et al. (2003). Risk Factors for Femicide in Abusive Relationships: Results From a Multi-site Case Control Study. *American Journal of Public Health*, 93, 1089-1097.
- Cawson, P. (2002). *Child Maltreatment in the Family: the experience of a national sample of young people*. London: NSPCC.

- Chan, K. (2011). Co-occurrence of intimate partner violence and child abuse in Hong Kong Chinese Families. *Journal of Interpersonal Violence*, 26, 1322-1342.
- Children and Young People's Partnership. (2011). *Children and Young People's Plan: 2011-2014*. Birmingham: Birmingham City Council.
- Cicchetti, D.V. (1994). Guidelines, Criteria and Rules of Thumb for Evaluating Normed and Standardized Assessment Instruments in Psychology. *Psychological Assessment*, 6, 284-290.
- Cicchetti, D. & Lynch, M. (1993). Toward an Ecological/Transactional Model of Community Violence and Child Maltreatment: Consequences for Children's Development. In D. Reiss, *Children and Violence* (pp. 96-113). New York: Guilford Press.
- Coohey, C. (2004). Battered Mothers Who Physically Abuse Their Children. *Journal of Interpersonal Violence*, 19, 943-952.
- Cox, C., Kotch, J. B. & Everson, M. (2003). A Longitudinal study of modifying influences in the relationship between domestic violence and child maltreatment. *Journal of Family Violence*, 18, 5-17.
- Cunningham, A. & Baker, L. (2004). *What about me! Seeking to understand a child's view of violence in the family*. London, ON.: Centre for Children and Families in the Justice System.
- Dixon, L. & Graham-Kevan, N. (2011). Understanding the nature and etiology of intimate partner violence and implications for policy and practice. *Clinical Psychology Review*, 31, 1145-1155.
- Dixon, L., Hamilton-Giachritsis, C., Browne, K. D. & Ostapuik, E. (2007). The co-occurrence of child and intimate partner maltreatment in the family: Characteristics of the violent perpetrators.

Journal of Family Violence, 22, 675-689.

Dutton, D. (2006). *Rethinking Domestic Violence*. Vancouver: UBC Press.

Edleson, J. (1999). The overlap between child maltreatment and woman battering. *Violence Against Women*, 5, 134-154.

Egeland, B., Yates, T., Appleyard, K. & van Dulmen, M. (2002). The long-term consequences of maltreatment in the early years: A developmental pathway model to antisocial behaviour. *Children's Services*, 5, 249-260.

English, D., Graham, J. C., Newton, R. R., Lewis, T. L., Thompson, R., Kotch, J. B. et al. (2009). At-risk and maltreated children exposed to intimate partner aggression/violence: What the conflict looks like and its relationship to child outcomes. *Child Maltreatment*, 14, 157-171.

Field, A.P. (2009). *Discovering statistics using SPSS*. London, England: SAGE.

Glass, N., Perrin, N., Hanson, G., Bloom, T., Gardner, E. & Campbell, J. (2008). Risk for Reassault in Abusive Female Same-Sex Relationships. *American Journal of Public Health*, 98, 1021-1027.

Gomez, A. & Speizer, I. (2009). Intersections Between Childhood Abuse and Adult Intimate Partner Violence Among Ecuadorian Women. *Maternal and Child Health Journal*, 13, 559-566.

Goodlin, W. & Dunn, C. S. (2010). Three Patterns of Domestic Violence in Households: Single Victimization, Repeat Victimization, and Co-Occurring Victimization. *Journal of Family Violence*, 25, 107-122.

Goodman, L., Dutton, M. & Bennett, L. (2000). Predicting Repeat Abuse Among Arrested Batterers. Use of the Danger Assessment Scale in the Criminal Justice System. *Journal of Interpersonal*

Violence, 15, 63-74.

Guedes, A. & Mikton, C. (2013). Examining the Intersections between Child Maltreatment and Intimate Partner Violence. *Western Journal of Emergency Medicine, 14, 377-379.*

Hanson, R. H. (2007). *The Validity of Risk Assessments for Intimate Partner Violence: A Meta-analysis.* Ottawa, ON: Public Safety Canada .

Hartley, C. (2004). Severe Domestic Violence and Child Maltreatment: Considering Child Physical Abuse, Neglect, and Failure to Protect. *Children and Youth Services Review, 26, 373-392.*

Hartley, C. (2002). The Co-Occurrence of Child Maltreatment and Domestic Violence: Examining Both Neglect and Child Physical Abuse. *Child Maltreatment, 7, 349-358.*

Healy, J. & Bell, M. (2005). *Assessing the risks to children from domestic violence.* Northern Ireland: Banardo's.

Heise, L. (1998). Violence Against Women: An Integrated, Ecological Framework. *Violence Against Women, 7, 262-290.*

Herrenkohl, T., Sousa, C., Tajima, E. A., Herrenkohl, R. C. & Moylan, C. A. (2008). Intersection of child abuse and children's exposure to domestic violence. *Violence & Abuse, 9, 84-99.*

Hillberg, T., Hamilton-Giachritsis, C. & Dixon, L. (2011). Review of Meta-analyses on the Association Between Child Sexual Abuse and Adult Mental Health Difficulties: A Systematic Approach. *Trauma, Violence and Abuse, 12, 38-49.*

- Hilton, N., Harris, G. & Rice, M. (2010). *Risk Assessment for Domestically Violent Men. Tools for Criminal Justice, Offender Intervention, and Victim Services*. Washington: American Psychological Association.
- Holt, S., Buckley, H. & Whelan, S. (2008). The impact of exposure to domestic violence on children and young people: A review of the literature. *Child Abuse and Neglect*, 32, 797-810.
- Hughes, H., Parkinson, D. & Vargo, M. (1989). Witnessing spouse abuse and experiencing physical abuse: A "double whammy?" *Journal of Family Violence*, 4, 197-209.
- Kershaw, C., Budd, T. & Kinshott, G. (2000). *The 2000 British Crime Survey*. London: Home Office Statistical Bulletin.
- Kline, P. (1986). *A Handbook of Test Construction. Introduction to psychometric design*. New York: Methuen & Co.
- Kline, P. (2000). *Handbook of Psychological Testing. Second Edition*. London: Routledge.
- Kohl, P., Edleson, J. L., English, D. J. & Barth, R. (2005). Domestic Violence and Pathways into Child Welfare Services: Findings from the National Survey of Child and Adolescent Well-Being. *Children and Youth Services Review*, 27, 1167-1182.
- Kropp, P. H. (1995). *Manual for the Spousal Assault Risk Assessment Guide 2nd Edition*. Vancouver, B.C: The British Columbia Institute Against Family Violence.
- Levesque, S., Clement, M. & Chamberland, C. (2007). Factors Associated with Co-occurrence of Spousal and Parental Violence: Quebec Population Study. *Journal of Family Violence*, 22, 661-674.

- Lichter, E. & McCloskey, L. A. (2004). The Effects of Childhood Exposure to Marital Violence on Adolescent Gender-Role Beliefs and Dating Violence. *Psychology of Women Quarterly*, 28, 344-357.
- Litrownik, A., Newton, R., Hunter, W. M., English, D. & Everson, M. D. (2003). Exposure to Family Violence in Young At-Risk Children: A Longitudinal Look at the Effects of Victimization and Witnessed Physical and Psychological Aggression. *Journal of Family Violence*, 18, 59-73.
- Local Safeguarding Children Board Birmingham. (n.d.). *Starting Section 47 Enquiries*. Retrieved September 9, 2013, from Child Protection Procedures: <http://www.lscbbirmingham.org.uk>
- Lowenstein, G. H. (2001). Risk as Feelings. *Psychological Bulletin*, 127, 267-286.
- McFarlane, J., Parker, B., Soeken, K. & Bullock, L. (1992). Assessing for abuse during pregnancy: Severity and frequency of injuries and associated entry into prenatal care. *Journal of the American Medical Association*, 23, 3176-3178.
- McFarlane, J., Soeken, K., Campbell, J., Parker, B., Reel, S. & Silva, C. (1998). Severity of abuse to pregnant women and associated gun access of the perpetrator. *Public Health Nursing*, 15, 201-206.
- Millar, A. (2009). *Inventory of Spousal Violence Risk Assessment Tools Used in Canada*. Ottawa, ON: Department of Justice Canada.
- Murphy, C. & McDonnell, N. (2008). *Escalating Violence. How to Assess and Respond to Risk: A Review of International Experience*. Coolock: Aoibhneas: Women and Children's Refuge.
- National Society for the Prevention of Cruelty to Children. (2010). *Child Protection Fact Sheet*.

London: NSPCC.

Neergaard, M.A., Olesen, F., Andersen, R.S. & Sondergaard, J. (2009). Qualitative description - the poor cousin of health research? *BMC Medical Research Methodology*, 9, 1-5.

NSPCC. (2011). *NSPCC: Serious Case Reviews*. Retrieved September 9, 2013, from NSPCC:

<http://http://www.nspcc.org.uk>

Office for National Statistics. (2013, August 1). *2011 Population Census- Birmingham Districts*.

Retrieved September 1, 2013, from Birmingham City Council: <http://www.birmingham.gov.uk>

Office for National Statistics. (2012). *Focus On: Violent Crime and Sexual Offences 2011/2012*.

London: Office for National Statistics.

O'Keefe, M. (1995). Predictors of Child Abuse in Maritally Violent Families. *Journal of Interpersonal Violence*, 10, 3-25.

Osofsky, J. (1999). The impact of violence on children. *The future of children*, 9, 33-49.

Radford, L., Corral, S., Bradley, C., Fisher, H., Bassett, C., Howat, N., et al. (2011). *Child Abuse and Neglect in the UK*. London: National Society for the Prevention of Child Cruelty.

Richards, L. (2009). *Domestic Abuse, Stalking and Harassment and Honour Based Violence (DASH, 2009) Risk Identification and Assessment and Management Model*. London: Association of Chief Police Officers.

Roehl, J., O'Sullivan, C., Webster, D. & Campbell, J. (2005). Intimate Partner Violence Risk Assessment Validation Study: Final Report. *NIJ Journal*, 1-55.

- Shipman, K.L., Rossman, B.B., & West, J.C. (1999). Co-occurrence of spousal violence and child abuse: Conceptual implications. *Child Maltreatment, 4*, 93-102.
- Slep, A. & O'Leary, S. G. (2009). Distinguishing Risk Profiles Among Parent-Only, Partner-Only, and Dually Perpetrating Physical Aggressors. *Journal of Family Psychology, 23*, 705-716.
- Snider, C., Webster, D., O'Sullivan, C. & Campbell, J. (2009). Intimate partner violence: development of a brief risk assessment for the emergency department. *Society for Academic Emergency Medicine, 16*, 1208-1216.
- Stith, S.M. Smith, D.B., Penn, C.E., Ward, D.B. & Tritt, D. (2004). Intimate partner physical abuse perpetration and victimization risk factors: A meta-analytic review. *Aggression and Violent Behaviour, 10*, 65-98.
- Straus, M. (1979). Measuring intrafamily conflict and violence: The Conflict Tactics Scale. *Journal of Marriage and the Family, 41*, 75-88.
- Straus, M. & Gelles, R. J. (1990). *Physical Violence in American Families: Risk Factors and Adaptation to Violence in 8145 Families*. New Brunswick, New Jersey: Transaction Publishers.
- Straus, M., Hamby, S. L., Boncy-McCoy, S. & Sugarman, D. B. (1996). The Revised Conflict Tactics Scales (CTS2). *Journal of Family Issues, 17*, 283-316.
- Tajima, A. (2004). Correlates of the Co-Occurrence of Wife Abuse and Child Abuse Among a Representative Sample. *Journal of Family Violence, 19*, 399-410.
- Tajima, E. (2002). Risk Factors for Violence Against Children: Comparing Homes With and Without Wife Abuse. *Journal of Interpersonal Violence, 17*, 122-149.

- Thiara, R. & Chung, D. (2008). *Domestic Violence and Abuse Notifications Screening Pilot An Evaluation*. Warwick: Centre for Safety and Wellbeing.
- Vulnerable Children's Overview and Scrutiny Committee. (2009). *Child Victims of Domestic Abuse*. Birmingham: Birmingham City Council.
- Wallace, H. & Roberson, C. (2010). *Family Violence: Legal, Medical and Social Perspectives. Sixth Edition*. Berkeley, CA: Peachpit Press.
- Websdale, N. (2000). *Lethality Assessment Tools: A Critical Analysis*. Pennsylvania: National Resource Center: VAWnet.
- Weisz, A., Tolman, R. & Saunders, D. (2000). Assessing the Risk of Severe Domestic Violence: The Importance of Survivors' Predictions. *Journal of Interpersonal Violence*, 15, 75-90.
- West Midlands Police. (2012). *DASH Policy*. Birmingham: West Midlands Police.
- Woods, S. (2005). Intimate Partner Violence and Post-Traumatic Stress Disorder Symptoms in Women: What We Know and Need to Know. *Journal of Interpersonal Violence*, 20, 394-402.
- Zolotor, A., Theodore, A. D., Coyne-Beasley, T. & Runyan, D. K. (2007). Intimate Partner Violence and Child Maltreatment: Overlapping risk. *Brief Treatment and Crisis Intervention*, 7, 305-321.

APPENDICES

Appendix A

Quality Assessment Form for Cross-sectional Studies.

Question	Yes	Partially	No	Unsure	Comments
Initial Screening					
Aims clearly stated?					
Is the study addressing risk factors for co-occurrence family aggression?					
Study Design					
Is a cross-sectional methodology appropriate?					
Sampling					
Were participants representative of defined population?					
Was a sufficient sample size used?					
Were potential confounding variables controlled for?					
Measurement and Biases					
Has IPV and CAN been defined and measured?					
Have appropriate assessments been used?					
Were reasons given for those refusing to partake in study?					
Results					
Were appropriate statistical analyses used?					
Have results been clearly reported?					
Have limitations been discussed?					
Applicability of Findings					
Does the research offer valuable contribution to the literature?					

Appendix B

Quality Assessment Form for Case-control Studies.

Question	Yes	Partially	No	Unsure	Comments
Initial Screening					
Aims clearly stated?					
Is the study addressing risk factors for co-occurrence family aggression?					
Study Design					
Is a case-control methodology appropriate?					
Sampling					
Were participants representative of defined population?					
Was a sufficient sample size used?					
Were potential confounding variables controlled for?					
Measurement and Biases					
Has IPV and CAN been defined and measured?					
Have appropriate assessments been used?					
Were reasons given for those refusing to partake in study?					
Statistics/Results					
Were appropriate statistical analyses used?					
Have results been clearly reported?					
Have limitations been discussed?					
Applicability of Findings					
Does the research offer valuable contribution to the literature?					

Appendix A

Completed data extraction forms

Data to be extracted	Study 1
Title	“Case Assessment and Service Receipt in Families Experiencing Both Child Maltreatment and Woman Battering”
Authors/ Year	Beeman, S.K., Hagemeister, A.K. & Edleson, J.L. (2001)
Study Design	Cross sectional design
Participants/Population	N=205 families recruited from police records for domestic assault and/or child maltreatment incidents occurring between 1992 and 1995 in Midwestern city in USA.
Comparison Groups	Two groups: 104 families with police records of dual violence and 101 families with police records of child maltreatment only.
Sample Methods	Non-random
Forms of Abuse Considered in Study	Broad term of child maltreatment utilised, no specification of form of abuse given in study. Domestic assault incident on police records used to categorise IPV victims.
Study Objective	To examine whether dual-violence families are different from child maltreatment –only families on characteristics of the family, child victim, adult perpetrator or maltreatment reports.
Assessments Used	None. Information gathered by social workers about perpetrator and victim age, gender, race, disabilities, chemical abuse, and relationship of alleged perpetrator to victim.
Statistical Analysis	Logistic regression analyses
Authors’ Conclusions	Dual violence families were more likely than child maltreatment only families to have an unrelated male in the household, to have a neglect allegation, and to have perpetrator substance abuse.
Strengths and Weaknesses	Participant sampling not random but rather, dependent on ability to match police and Child Protection screening codes in different databases. Did not compare IPV only group and no control group was used. Use of pre-existing data gathered for other purposes meant that additional risk factors could not be investigated.
Quality Assessment Score	20

Data to be extracted	Study 2
Title	“Battered Mothers Who Physically Abuse Their Children”
Authors/ Year	Coohey, C. (2004)
Participants/Population	Sample of 184 mothers: 53 in the co-occurrence group, 57 in the not battered and not abusive group, 33 in the battered but not abusive group and 41 in the abusive but not battered group.
Comparison Groups	Co-occurrence group, control group, battered but not abusive group, and abusive but not battered group.
Study Design	Case-control design
Sample Methods	Mothers recruited from two sources: a) all parenting classes for mothers involved with Child Protection Services (CPS) in Chicago during a 1 year period b) several public schools in the same communities where the CPS referred mothers were attending classes. Inclusion in study dependent on consent and if currently had intimate partner.
Study Objective	Investigate what factors contribute to why some battered mothers physically abuse their children by comparing different groups.
Forms of Abuse Considered in Study	Mothers who engaged in child neglect-only were excluded from the study as only physical child abuse was investigated. If CPS records indicated mother physically abused her children she was classified as physically abusive. Confirmatory responses to any of the Severe Assault Items by intimate partner placed women in the “battered” category.
Assessments Used	Self –report, Severe Assaults Scale (Adapted from Stressful Life Events Scale) and Conflict Tactics Scales (CTS): Husband to Wife and Parent to Child Subscales were used to determine which group mother belonged to. Demographic information, relationship quality, and emotional support information were collected for comparison between the groups.
Statistical Analysis	Chi-square, one-way ANOVA and post hoc tests were used to compare mothers in the co-occurrence group to the other three groups on demographic variables.
Authors’ Conclusions	Mothers in the co-occurrence group were more likely to report that their own mothers severely assaulted them as children, more likely to report having had poorer quality relationships with, and received less support from their own

	mothers, more likely to report having more stressors, and are more likely to have known their partners for less time.
Strengths and Weaknesses	Relied on self-report of whether women were abused or abusive which may reduce reliability of being allocated into the correct group. Limited information collected for comparison between the groups.
Quality Assessment Score	21

Data to be extracted	Study 3
Title	“The Co-occurrence of Child and Intimate Partner Maltreatment in the Family: Characteristics of the Violent Perpetrators”
Authors/ Year	Dixon, L., Hamilton-Giachritsis, C., Browne, K & Ostapuk, E. (2007)
Participants/Population	N=105 parents.
Comparison Groups	Sample included 43 fathers and 23 mothers who perpetrated both partner and child maltreatment, 23 fathers and 26 mothers who perpetrated child maltreatment only, 2 fathers and 23 mothers were victims of intimate partner maltreatment and perpetrators of child maltreatment, and 7 fathers and 15 mothers who did not maltreat, but lived with an individual who did.
Study Design	Cross-sectional design
Sample Methods	Families were selected from Forensic Psychology consulting service records after completing assessments on families who had allegations of child maltreatment made against them. Participants lived in Midlands or South Wales, UK and were all assessed by Forensic Psychology Service between June 1996 and June 2003.
Forms of Abuse Considered in Study	In cases where partner suffered multiple forms of abuse or neglect, the most active form of abuse was designated to define abuse type. Cases of physical and sexual abuse child abuse were concatenated into one active category of “physical and/or sexual child abuse”. Cases of neglect were classified as “passive child neglect”.
Study Objective	To consider the characteristics associated with mothers and fathers who maltreat their child and each other, in comparison to parents who only maltreat their child.
Assessments Used	Millon Clinical Multiaxial Inventory (MCMI-III), Parenting Stress Index (PSI),

	and Index of Need.
Statistical Analysis	Chi square, Fisher Exact Tests
Authors' Conclusions	Fathers in the co-occurrence group had significantly more factors associated with the development of a criminogenic lifestyle compared to fathers who child maltreat only. Marked sex differences were noted, with co-occurrence fathers demonstrating significantly more antisocial characteristics, less mental health problems, and fewer feelings of isolation compared to co-occurrence group mothers.
Strengths and Weaknesses	Cross-sectional, non-randomised data makes generalisations to wider population difficult and lack of control groups limits interpretation. Due to nature of data, parents may have exaggerated the presence of aggressive acts by their partners due to having a vested interest in presenting themselves in a favourable light. Strength: investigated risk factors based on theoretical models.
Quality Assessment Score	25

Data to be extracted	Study 4
Title	Three Patterns of Domestic Violence in Households: Single Victimization, Repeat Victimization, and Co-occurring Victimization"
Authors/ Year	Goodlin, W.E & Dunn, C.S. (2010)
Participants/Population	N= 4,331 National Crime Victimization Respondents
Comparison Group	Single victimisation, Repeat Victimization and Co-Occurrence group
Study Design	Cross-sectional
Sample Methods	Utilises probability sampling of households from 1992-2004.
Forms of Abuse Considered in Study	Households reporting one violent victimisation (rape, assault, robbery, aggravated assault, simple assault) by a family member or significant other from 1992 to 2004 were deemed to be single occurrence households. Households with two or more violent victimisations of the same victim over the same period of time were considered to be repeat victimisation households. Households that had multiple violent incidents involving different victims (adult male hits adult female and adult female hits child) were designated as co-occurrence households. However, co-occurrence households include mutual spouse on spouse violence, parent-child violence, and violence by other family

	members).
Study Objective	To analyse the effects of household variables, victim characteristics and incident characteristics on three household family violence patterns (single victimisation, repeat victimisation and co-occurrence)
Assessments Used	National Crime Victimization Survey
Statistical Analysis	Binary logistic regression
Authors' Conclusions	Co-occurrence households were more likely to report a higher number of people living in the household and have victims with less than a high school education compared to single and repeat victimisation households. Respondents victimised by ex-spouses, parent/step-parents, siblings and other relatives were consistently associated with living in co-occurrence households compared to those victimised by spouses.
Strengths and Weaknesses	Youngest children who are included in the NCVS so parental abuse on children younger than 12 years old have not been considered. NCVS relies on self report of participants, allowing for potential for bias. Many forms of family violence used in co-occurrence group so impossible to decipher information about co-occurrence of just IPV and CAN in household.
Quality Assessment Score	18

Data to be extracted	Study 5
Title	"Domestic violence and pathways into child welfare services: Findings from the National Survey of Child and Adolescent Well-Being"
Authors/ Year	Kohl, P.L., Edelson, J.L., English, D.J. & Barth, R.P. (2005)
Participants/Population	N= 3931 National Survey of Children and Adolescent Well-Being (NSCAW) respondents
Comparison Groups	Compared Child Protection Service Families with and without presence of Domestic Violence.
Study Design	Case control
Sample Methods	Probability sampling of children and families referred to, and investigated by, Child Protection Service systems were contacted to complete NSCAW
Forms of Abuse Considered in Study	Investigation of child maltreatment by CPS designated entire child maltreatment group (even if families had no further child welfare work following investigation). Further self report of the presence of active DV in

	family home during child welfare worker interview was used to categorise co-occurrence group from the child maltreatment only group.
Study Objective	To examine the relationship of DV to other environmental and risk factors, and determine co-occurrence families are more likely to have substantiated cases of maltreatment.
Assessments Used	No validated assessments used, only interviews with family by Child Welfare workers
Statistical Analysis	Multinomial logistic regression
Authors' Conclusions	Child welfare workers' assessments indicated that dually aggressive parents had higher rates of substance abuse, mental health problems, arrests and histories of child maltreatment in their own background.
Strengths and Weaknesses	The nature of variables used in this study make it difficult to determine whether the differences between the groups are in degree or in kind. Coding on DV and co-occurrence group relied on self report of DV in home and did not use any validated measure to assess this or any of risk factors. Used "active DV as a grouping criteria but did not define what "active DV" was.
Quality Assessment Score	21

Data to be extracted	Study 6
Title	"Factors Associated with Co-occurrence of Spousal and Parental Violence: Quebec Population Study"
Authors/ Year	Levesque, S., Clement, M. & Chamberland, C. (2007)
Participants/Population	N=3148
Study Design	Case control
Sample Methods	Used data collected from the 2004 survey on "Family Violence in the Lives of Children" conducted by the Quebec Statistics Institute. Random sampling was employed using 3,148 randomly generated phone numbers. The telephone numbers were distributed proportionally across three states in Quebec. When telephone contact made and suitability determined a single child was then randomly selected from each household.
Forms of Abuse Considered in Study	Women were assigned to the spousal violence group if she reported physical violence or psychological abuse in the preceding 12 months. A dichotomisation was created on the basis of the occurrence or non-occurrence of spousal

	<p>violence. Women who indentified the presence of a violent behaviour, either as a victim or perpetrator, having happened rarely, often, or very often during the 12 months preceding the survey were given a quotation of 1, representing the presence of spousal violence.</p> <p>Three variables were used to determine whether parental violence against children has occurred within the 12 months preceding the survey: psychological aggression (three times or more), minor physical assault and severe physical assault. Women who answered yes to one or more of these variables were placed in the parental violence group.</p> <p>The third group, the co-occurrence of spousal and parental violence (SPV) group was formed of respondents who reported both spousal and parental violence, as measured by the variables defined above.</p>
Study Objective	To determine what differences exist between three groups in which family violence occurs (spousal violence, parental violence and co-occurrence of the two) and to better document the factors related to the different types of family violence by developing an explanatory model.
Assessments Used	Adult-Adolescent Parenting Inventory, Parenting Stress Index, Parent-Child Conflicts Tactics Scales, Social Provision Scale, EV99 (Enquete sure la violence familial dans la vie des enfants (1999).
Statistical Analysis	Chi-square, ANOVA, Bivariate Regression
Authors' Conclusions	<p>The respondents in the group in which there was co-occurrence had a more pervasive history of violence in their childhood, either as witnesses or victims, than the respondents in the other two groups. They had a lower level of education, rated their spousal relationship as less harmonious, perceived their economic situation as worse, and fewer fathers in this group had a paying job. Co-occurrence mothers reported more parenting stress. These various factors validated the assertion that people are grappling with the dual problems of spousal and parental violence have greater personal and family vulnerabilities. The groups did not differ in terms of adjusted income score, age of mother or father at birth of child, marital status, or type of family.</p>
Strengths and Weaknesses	Use of self report in questionnaire allows for potential bias. Comparatively fairly small spousal violence only group (n=89) which may not be representative. Only five questions in survey were used to assess the presence

	of spousal abuse. Bi-directionality of violence (being both a victim and a perpetrator of violence within the family was not assessed. Strength: Clear definition of abuse coding criteria.
Quality Assessment Score	25

Data to be extracted	Study 7
Title	“Distinguishing Risk Profiles Among Parent-Only, Partner-Only and Dually Perpetrating Physical Aggressors”
Authors/ Year	Smith Slep, A.M & O’Leary S.G (2009)
Comparison groups	No aggression, parent aggression only, partner aggression only, and dually aggressive groups
Participants/Population	N=453 couples from community sample with 3-7 year old children.
Study Design	Cross-sectional and correlational design
Sample Methods	Participants were recruited through a random digit dialing procedure. Whenever a call reached an adult, the respondent was asked to participate in the study. All willing respondents were administered a brief demographic interview to determine study eligibility and then interviewed.
Forms of Abuse Considered in Study	Does not report criteria for allocating participants into no aggression, parent aggression only, partner aggression only, and dually aggressive groups.
Study Objective	To investigate how a wide variety of known risk factors for parent-to-child and partner physical aggression distinguish among people who do not physically aggress, aggress only against their partners or their children, or aggress against both their partners and children.
Assessments Used	Conflict Tactics Scale-II, Parent-Child Conflict Tactics Scale, Percieved Stress Scale, Childhood History of Aggression, State-Trait Anger Expression Inventory, Beck Depression Inventory- II, Family of Origin Aggression (modified version), Hyperactive-Impulsive subscale of the Adult Attention Deficit Disorders Evaluation Scales, Interpersonal Support Evaluation List, Negative Life Events (adapted from the Life Experiences Survey), Dyadic Adjustment Scale, Power Imbalance Scale, Dominance-Jealousy Scale (based on Psychological Maltreatment of Women Scale), Partner Cognition Scale, Emotional Flooding by Partner Anger Scale (designed for study), Physiological Reactivity, Attitudes approving of parent aggression (adapted from Acceptance

	of Violence Questionnaire), Parenting Satisfaction Scale, Child Responsibility Attributions (adapted from Parent Cognitions Scale), Experienced Anger-Video Vignettes.
Statistical Analysis	MANOVA
Authors' Conclusions	Both dual-aggressor men and women demonstrated higher overall risk compared to partner-aggressive only and parent-aggressive only men and women. Dual aggressors were found to be high on both parent and partner role-specific risk. Dual aggressors were also found to be high on role-independent risk and, especially for men, reported elevations on risk factors of all types, compared with the singly aggressive and non-aggressive groups.
Strengths and Weaknesses	Does not give clear indication of how comparison groups are allocated, Strengths: use of standardised assessments, wide variety of potential risk factors explored.
Quality Assessment Score	24
Data to be extracted	Study 8
Title	“Correlates of the Co-Occurrence of Wife Abuse and Child Abuse Among a Representative Sample”
Authors/ Year	Tajima, E.A. (2004)
Participants/Population	N=2733 community households where respondents were married (or living together) and had at least one child under 18.
Comparison Groups	Homes with child abuse alone, wife abuse alone, and co-occurring wife and child abuse
Study Design	Cross-sectional design
Sample Methods	Reanalysed data from the 1985 National Family Violence Survey, a nationally representative sample of 6002 households. Telephone surveys were conducted with a response rate of 84%. Telephone numbers were chose by random digit dialing, stratified by region and size of place.
Forms of Abuse Considered in Study	Physical Child Abuse: Measures of violence toward children were drawn from items from the Conflict Tactics Scale (CTS). Physical child abuse was operationally defined as any of the following occurring in the preceding year: throwing something at the child, kicking, biting or hitting with a fist, beating up, burning or scalding, threatening with a knife or gun, or using a knife or

	<p>gun.</p> <p>Wife Abuse: Coded by presence of any of the following in the preceding year: threatening to hit or throw something at, throwing something at, pushing, grabbing or shoving, slapping, kicking, biting or hitting with a fist, hitting or trying to hit with an object, beating up, choking, threatening with a knife or gun, using a knife or firing a gun and forced sex or attempted forced sex.</p>
Study Objective	To identify differences and similarities between subgroups of households with abuse, and identify the risk factors associated with the co-occurrence of wife abuse and child abuse.
Assessments Used	<p>Responses on Conflicts Tactics Scales were also used to define groups.</p> <p>National Family Violence Survey (1985) data was used that covered: parent characteristics, demographics, employment, education level, history of childhood abuse, depression index, stress index, physical health, and alcohol and drug use. Household characteristics were also collected: years married, years in the community, number of children in the household, family type (step-family or biological), region of country, presence of non-violent marital discord and Child Characteristics were also collected: demographics, presence of child problems, whether biological or step-child.</p>
Statistical Analysis	One-way ANOVA and Chi-Square
Authors' Conclusions	The co-occurrence of wife and child abuse was marked by less education, worse health, increased reports of depression, and increased husband drug use when compared to the other two groups. Findings suggest that there are key differences in the three types of households indicating possibly distinct etiologies and processes.
Strengths and Weaknesses	Dated information collected in NFVS survey 9 years before the study was completed so may not be generalisable to time of publication. Single mothers were excluded from the original survey, so no data on them despite research suggesting that an elevated proportion of battered women are single mothers abused by estranged partners. Teenage parents were also excluded from the survey limiting generalisability of findings. Study did not examine violence perpetrated against men in the household. Study also relied on self reporting of abuse in household, opportunity for social desirability bias. Comparatively small sample size of group with wife abuse and child abuse (n=37) which

	resulted in bivariate analyses being used instead of multi-variate analyses.
Quality Assessment Score	22

Data to be extracted	Study 9
Title	“The Co-occurrence of Child Maltreatment and Domestic Violence: Examining Both Neglect and Child Physical Abuse”
Authors/ Year	Hartley, C.C. (2002)
Participants/Population	N=441 families where confirmed child maltreatment reports had been made to the Iowa Department of Human Services between December 1995 and February 1998.
Comparison Groups	Co-occurrence domestic violence and child neglect, Child neglect only, Co-occurrence domestic violence and child physical abuse, and child physical abuse only. All domestic violence cases consisted of women victims.
Study Design	Cross-sectional
Sample Methods	Data were obtained from a cross-sectional sample of all confirmed child maltreatment reports made to Iowa Department of Human Services from the city of Cedar Rapids, Iowa, USA between December 1995 and February 1998.
Forms of Abuse Considered in Study	All cases were confirmed child maltreatment cases from the Iowa Department of Human Services. Three different sources of information were used to identify the presence of domestic violence: the assessment of narratives completed by child protection assessment workers investigating the child abuse allegation, the service authorization forms completed by child protection service workers on families referred for service after the initial investigation and a database kept by the Cedar Rapids Police Department on all domestic violence reports or arrest occurring in the city from January 1996 through July 1999. A case was coded as domestic violence present if there was a clear indication from at least one source that the current father was battering the mother. Cases coded as maltreatment-only had no indication of past or present domestic violence of either parent by a former or current partner using all three sources of data.
Study Objective	To examine a) whether co-occurrence families differ from child maltreatment only families on demographic characteristics of parents or family, b) whether

	co-occurrence families differ from child-maltreatment-only families on the presence of parental problems or family stressors, c) whether co-occurrence families differ from child-maltreatment only families on the characteristics of the maltreatment incident.
Assessments Used	No validated assessment used. Information from the child protection assessment narratives was used which contained information about parent demographics, parent's criminal history, parent's mental and physical health, parent's abuse of substances, household composition, biological relationship of adults to children, age of parents and children, type of maltreatment, person(s) responsible for maltreatment and incident reports.
Statistical Analysis	Chi-square, T test, ANOVA
Authors' Conclusions	Descriptive analyses found more differences between families with domestic violence and neglect and neglect only than between co-occurring physical abuse-only families. Analyses looking at the association or interaction between the type of maltreatment and presence of domestic violence found a significant association between marital status, father's biological relationship to the child, mother as perpetrator, and age of the children with co-occurrence of domestic violence for neglect, but not for physical abuse.
Strengths and Weaknesses	Coding for groups was limited to information only held in narrative reports so reliability of coding concerns. No validated assessments used in study.
Quality Assessment Score	25

Appendix D

Data Extraction Form

Study

Title: _____

Authors and Date: _____

Study Objective

Population:	Co-occurrence of IPV and CAN group present?	Y	N
Comparison:	At least one comparison group used?	Y	N
	CAN only group	Y	N
	IPV only group	Y	N
	Control Group	Y	N
	Other _____		
Study Design	Cross-sectional	Y	N
	Case Control	Y	N
	Other _____		
Sampling	Random Sampling	Y	N
	Non-random Sampling	Y	N

Criteria used for coding presence of IPV: _____

Criteria used for coding presence of CAN: _____

Statistical Analyses Used: _____

Validated Assessments used : 1. _____ 3. _____
2. _____ 4. _____

Results: _____

Authors' Conclusions: _____

Study Strengths and Weaknesses: Weaknesses: 1)

2)

3)

Quality Assessment Score: _____ /26

Appendix E

Excluded papers

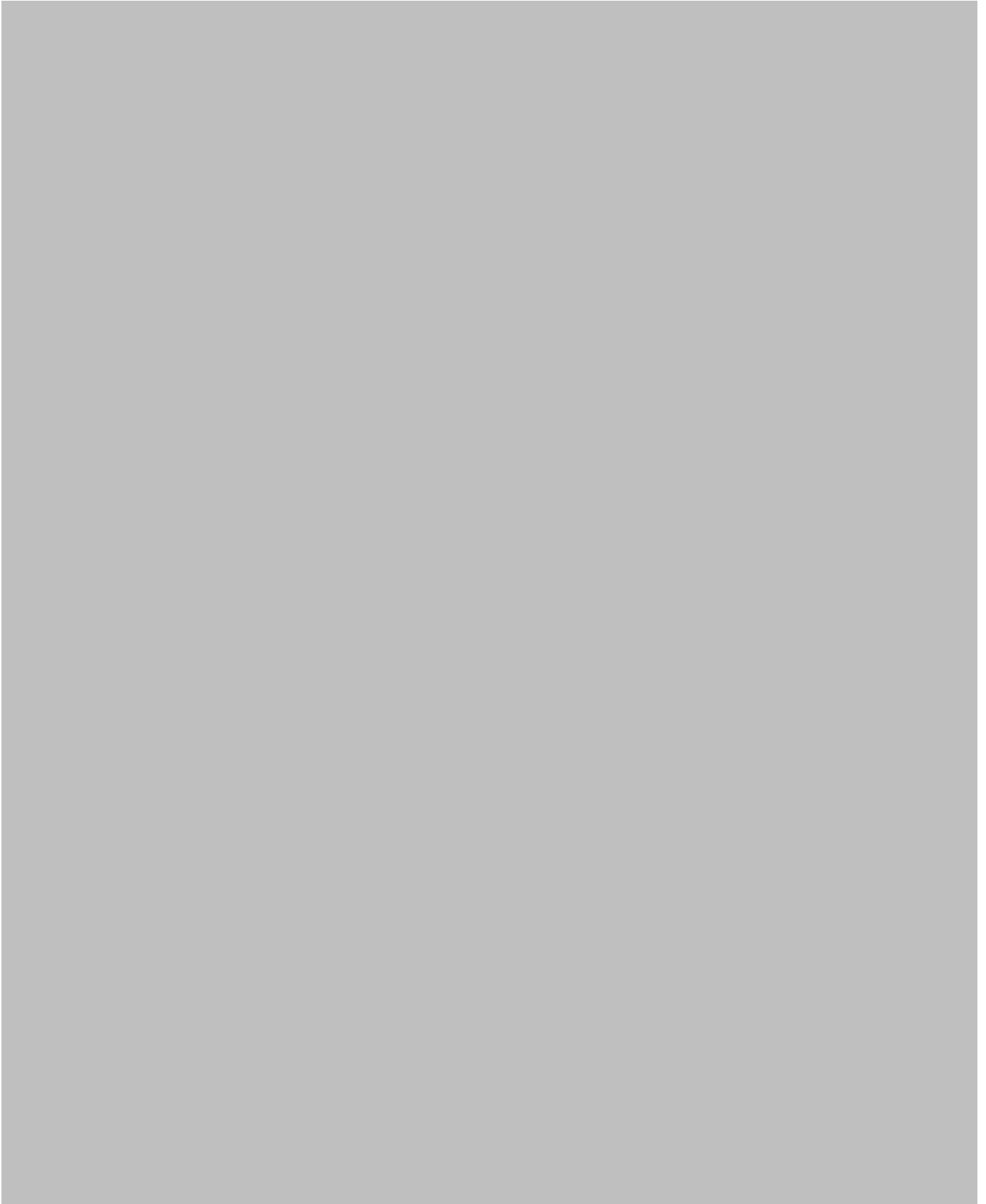
	Reason for Exclusion
Chan, K.O. (2011). Co-occurrence of Intimate Partner Violence and Child Abuse in Hong Kong Chinese Families.	Examined prevalence only
Cox, C.E., Kotch, J.B., & Everson, M.D. (2003). "A Longitudinal Study of Modifying Influences in the Relationship Between Domestic Violence and Child Maltreatment"	Not relevant
English, D.J., Graham, J.C., Newton, R.R., Lewis, T.L., Thompson, R., Kotch, J. & Weisbart, C. "At-Risk and Maltreated Children Exposed to Intimate Partner Aggression/Violence".	Does not investigate risk factors for co-occurrence if IPV and CM
Gomez, A.M. & Speizer, B.S. (2009). "Intersections Between Childhood Abuse and Adult Intimate Partner Violence Among Ecuadorian Women".	Does not investigate risk factors for co-occurrence of IPV and CM
Herrenkohl, T.I., Sousa, C., Tajima, E.O., Herrenkohl, R.C. & Moylan, C.A. (2008). "Intersection of Child Abuse and Children's Exposure to Domestic Violence".	Does not investigate risk factors for co-occurrence if IPV and CAN
O'Keefe, M. (1995) "Predictors of Child Abuse in Maritally Violent Families".	Outside inclusion date range
Margolin, G, Gordis, E.B., Medina, A.M. & Oliver, P.H. (2003). "The Co-Occurrence of Husband-to-Wife Aggression, Family-of-Origin Aggression, and Child Abuse Potential in a Community Sample".	Examined prevalence only
Rumm, P.D., Cummings, P., Krauss, M.R., Bell, M.A., & Rivara, F.P. (2000). Identified spouse abuse as a risk factor for child abuse.	No comparison of risk factors for IPV and co-occurring abuse
Slep, A.M. & O'Leary, S.G. (2005). "Parent and Partner Violence in Families With Young Children: Rates, Patterns, and Connections.	No comparison of groups
Tajima, E.A. (2000). "The relative importance of wife abuse as a risk factor for violence against children.	No comparison of risk factors for IPV and co-occurring abuse
Tajima, E.A. (2002). "Risk Factors for Violence Against Children: Comparing Homes with and Without Wife Abuse".	Investigated prevalence only
Zolotor, A.J., Theodore, A.D., Coyne-Beasley, T. & Runyan, D.K. (2007). "Intimate Partner Violence and Child Maltreatment: Overlapping Risk".	No comparison groups

Appendix F

MDVRITS protocol

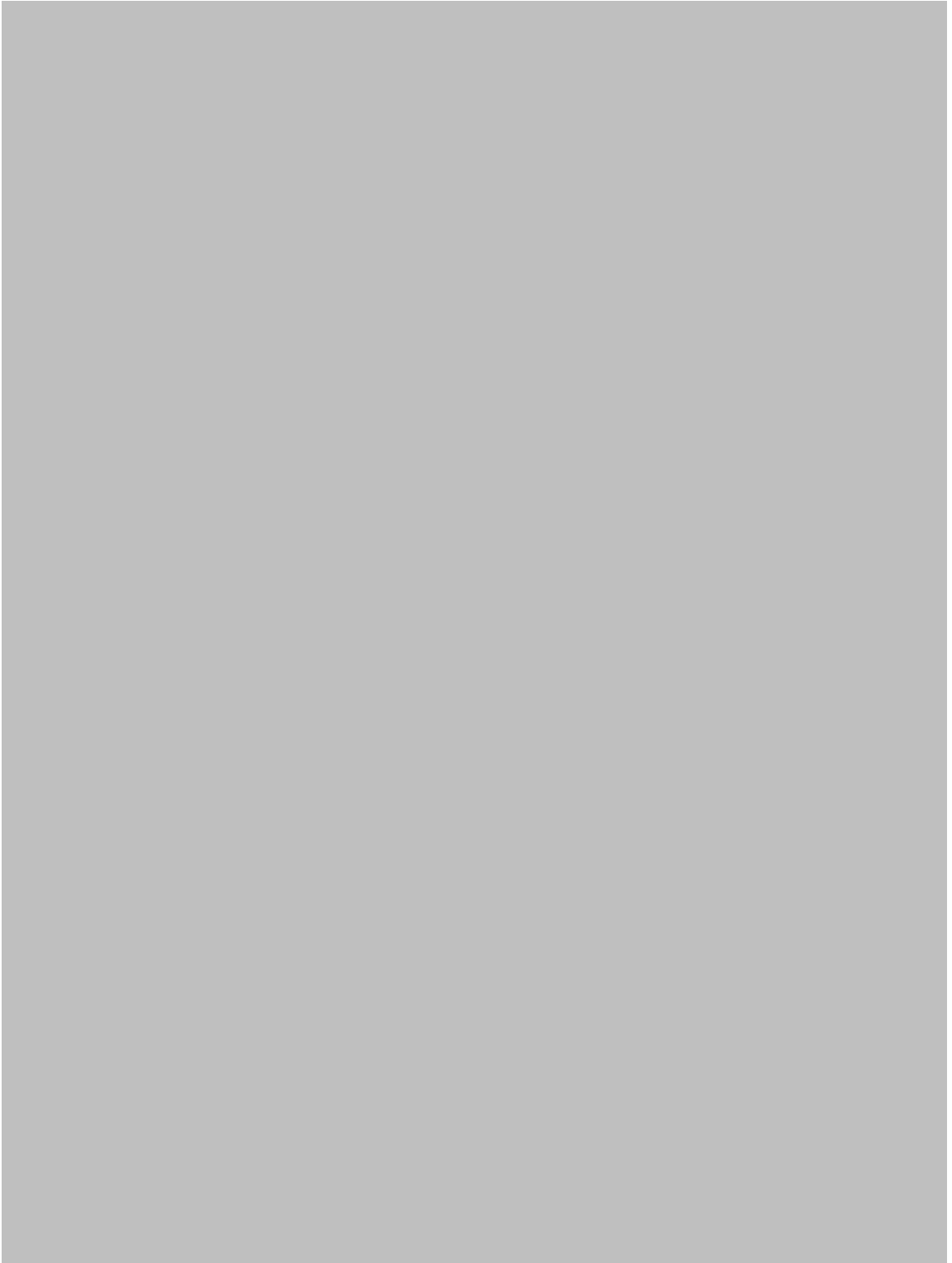
Moderate – Scale 1			Moderate to Serious – Scale 2			Serious – Scale 3			Severe – Scale 4 Child in need of Protection – Children's Service consider if Section 47 enquiry and core assessment required. Children may be at risk of being 'looked after'.		
Child/ren & families with additional needs. CAF completed-Single practitioner - targeted support			Child/ren & families with additional needs. CAF completed – Lead professional – integrated support			Children in Need-Children's Service consider S.17 but Safeguarding intervention may be necessary if threshold of significant harm is reached. Professional case planning			Evidence of domestic violence		
Child/ren under 7yrs/ or with special needs increases risks. The younger the children the higher the risk to their safety. Consider protective factors.			Child/ren under 7yrs/ or with special needs - at higher risk of emotional/physical harm – limited self-protection strategies -can raise threshold to Scale 3. Consider protective factors			Children aged under 7yrs/ or children with special needs can raise threshold to scale 4			Repeated serious and/or severe physical violence – life threatening violence		
Evidence of DV			Evidence of DV			Evidence of domestic violence			Attention to the duration and severity of violent behaviour children exposed to		
1 - 3 minor incidents of physical violence which were short in duration			History of minor/moderate incidents of physical violence-short duration			Incident(s) of serious and/or persistent physical violence in family			Use/assault with weapons		
Victim did not require medical treatment			Victim received minor injuries-medical attention not sought			Increasing in severity/ frequency and/or duration - History of previous assaults			Abuser's violation of protective orders and/or child contact and non-contact orders		
Intense verbal abuse			Evidence of intimidation/ bullying behaviour- pushing/ finger poking/ shoving/ to victim but not towards children -Destruction of property			Victim and/or children indicates that they are frightened of abuser - put in fear by looks, actions, gestures and destruction of property (emotional & psychological abuse)			Criminal history of abuser – assault of ex partners/others/use of violence or suspected -military/gangland connections of abuser		
Risk factors/ Potential vulnerabilities			Intense verbal abuse-consistent use of derogatory language			Recent separation – repeated separation/reconciliation/ongoing couple conflict			Intense stalking/harassment behaviour of abuser		
Children were not drawn into incidents			Risk of isolation -Abuser attempts to control victims' activities, movements & contact with others			Stalking/harassment of mother/children			Recurring or frequent requests for police intervention		
Control of abuser is not intense			Children present in the home during an incident but did not directly witness			Abuser breaching bail conditions/civil protective orders (non- contact orders)			Victim requires treatment for injuries sustained-Medical attention required but not sought/ or injuries explanation is implausible		
Protective factors			Potential likelihood of emotional abuse of children			Victim required medical treatment but not sought/ or explanation for injuries implausible			Threats to kill or seriously injure victim and/or children		
Child/mother relationship is nurturing, protective and stable			Cultural issues: Language barriers- Professional interpreter required			Recurring or frequent requests for police intervention			Victim is very frightened of abuser –believes intent of threats		
Significant other in child's life -positive and nurturing relationship			New immigrant unaware of support services and official processes			Incidences of violence occur in presence of children –consider duration of exposure			Mother is intensively controlled (compliant) may be submissive -worn down by abuse		
Presence of children was a restraint for the abuser			Victim unwilling to disclose abuse due to allegiance to own community, faith family. Can raise threshold to scale 3			Threats of harm to mother/and or children			Confirmed emotional/psychological abuse of mother		
Abuser accepts responsibility for abuse/violence indicating remorse			Disability issues within family – positive support networks			Excessive jealousy/possessiveness of abuser -domineering in relationship			Victim is pregnant/mother is abused post natal		
Abuser willing to engage in services to address his abusive behaviour			Mental health issues – abuser & or victim seeking appropriate help			Financial control maintained by abuser			Sexual assault/suspected sexual abuse of victim		
Victim has positive support from family/ friends & community			Age of abuser and/or victim – responsible not isolated			Abuser has history of domestic abuse in previous relationships			Incidences of violence witnessed & occurred in presence of children – distressed		
Victim appears emotionally strong (not worn-down by the abuse)			Child/mother relationship is nurturing, protective & stable. In spite of abuse, victim was not prevented from seeing to the needs of her children			Risk factors/ Potential vulnerabilities			Children have directly intervened in incidences		
Victim sought appropriate support and/or is willing to accept help from other agencies			Significant other in child's life – positive and nurturing relationship			Mental health issues – abuser and/or victim-raises concern			Children have been physically assaulted/abused		
Y=Yes N=No S=Suspected			Older children used coping/ protective strategies			Substance abuse by abuser and/or victim-raises concern			Confirmed emotional abuse of children		
			Victim attempted to use protective strategies with older children			Strong likelihood of emotional abuse of children –may display behavioural problems			Suspected/confirmed sexual abuse of children		
			Victim is prepared to take advice on safety issues			Children unable to activate safety strategies due to fear or intense control of abuser			Cultural issues – possible language barriers/immigration constraints/fear of racism and: House arrest and or severe restrictions on movements		
			Victim has insight into the risks to her children posed by the abuse			Lack of significant other as a positive support to child			Substantial risk of/confirmed so called 'honour' based violence(HBV)		
			Victim has positive support from family/friends and community			Child contact issues -consider risks to child			(Perceived) transgressions results in threats of serious violence &/or acts of violence- killings		
			Abuser willing to engage in services to address his abusive behaviour			Adolescent – increased risk of intervening in abuse and emerging concerns re self harm			Substantial risk of/confirmed forced marriage(FM)- history of forced marriage/early marriage in family, prolonged/unexplained absences from school, siblings that have runaway from home		
						Abuser suspected of using physical discipline towards children			Extended &/or birth family support DV/HBV/FM-Collusion/active involvement of the community		
						Abuser shows lack of insight/empathy into how his abusive behaviour is affecting child/ victim			Risk factors/Potential vulnerabilities		
						Abuser minimisation of abuse-lack of remorse/guilt			Mental health issues – abuser and/or victim- raises significant concern		
						Abuser is step-father/family unit has step-siblings			Substance abuse by abuser and/or victim- raises significant concern		
						Abuser's abuse of pets/animals			Substantial risk of serious physical violence in the family		
						Emerging concerns about emotional stability/care of abuser's relationship with children- limited parenting capacity & no protective abilities due to his abusive behaviour			Threats or attempts to abduct children		
						Emerging concerns about emotional stability of child/mother relationship (parenting capacity and protective concerns)			Children exhibit sexualised behaviour and/or sexually harmful behaviour		
						Abuser use of avoidance/resistance to engage in services increases risk level to children			Adolescent – increased risk of intervening in abuse and self harm-emerging concerns re mental health issues		
						Victim fears statutory services –avoidance & resistance to engage increases risk to children			Physical discipline of children by abuser		
						Family/Relatives/neighbours reports concerns re victim/children			Victim uses physical discipline on children as an alternative to harsher physical abuse by abuser		
						Victim has experienced domestic violence in previous relationships			Recent suicidal or homicidal ideation/intent by abuser		
						Cultural issues- possible language barriers/ new immigrant/minimisation due to fear of racism and: Restriction on movement-accompanied by family members to appointments/speaking for victim			Victim suicidal/ attempted suicide/self harming- especially BMER victims		
						Immigration constraints-No recourse to public funds/Threats of deportation/no legal status			Victim minimising risks to children/remains in abusive relationship, protection orders not sought, or activated		
						Abuser's interpretation of culture/ faith used as a form of control -to curtail woman's autonomy			Victim has poor general health		
						Extended family support of abuser/ and may perpetrate abuse themselves			Abuser-lack of empathy/insight into how his abusive behaviour is affecting child/victim		
						Family Honour- Transgression of traditional forms of acceptable female behaviour results in punishment i.e. controlling/coercive behaviours, emotional abuse, social ostracism, harassment			Abuser minimisation of abuse-lack of remorse/guilt		
						Victim feel prevented from leaving abusive situation due to threats of such forms of punishment			Frequent moves by family – making it difficult to engage		
						Disability issues within family – isolation			Abuser/Victim use of avoidance/resistance to engage in services-increases risks to children		
						Age disparities or Abuser/Victim-under 25 with limited support – personal vulnerabilities			Abuser uses threatening aggressive behaviour towards supportive professionals		
						History of childhood abuse/disruptive childhood experiences -abuser and/or victim			Social care/supportive agencies unable to work constructively with family -social work paralysis		
						Recent life crisis/stress factors -i.e unemployment, financial problems, illness, death			Disability issues within family – raises significant concern		
						Protective factors			Age disparities - Abuser and/or victim under 25 with limited support- personal vulnerabilities		
						Older children use protective strategies			History of childhood abuse/disruptive childhood experiences abuser and/or victim		
						Victim will seek positive support from significant other			Protective factors		
						Victim -attempted to use protective strategies but abuser's violence & control is intense			Limited protective factors are present – severe level of violence and psychological abuse of mother and children. DV high risk factors predict recidivism		
						Victim will engage with supportive services and seek safety advice – but abuser's control interferes with her level of commitment to engage			Use of kinship placements as a protective factor – be alert to domestic abuse having occurred or occurring in extended families		
						Limited protective factors are present – serious level of violence and psychological abuse of victim, emotional abuse of children and DV risk factors predict recidivism					
						Use of kinship placements as a protective factor – be alert to domestic abuse having occurred or occurring in extended families					

Appendix G

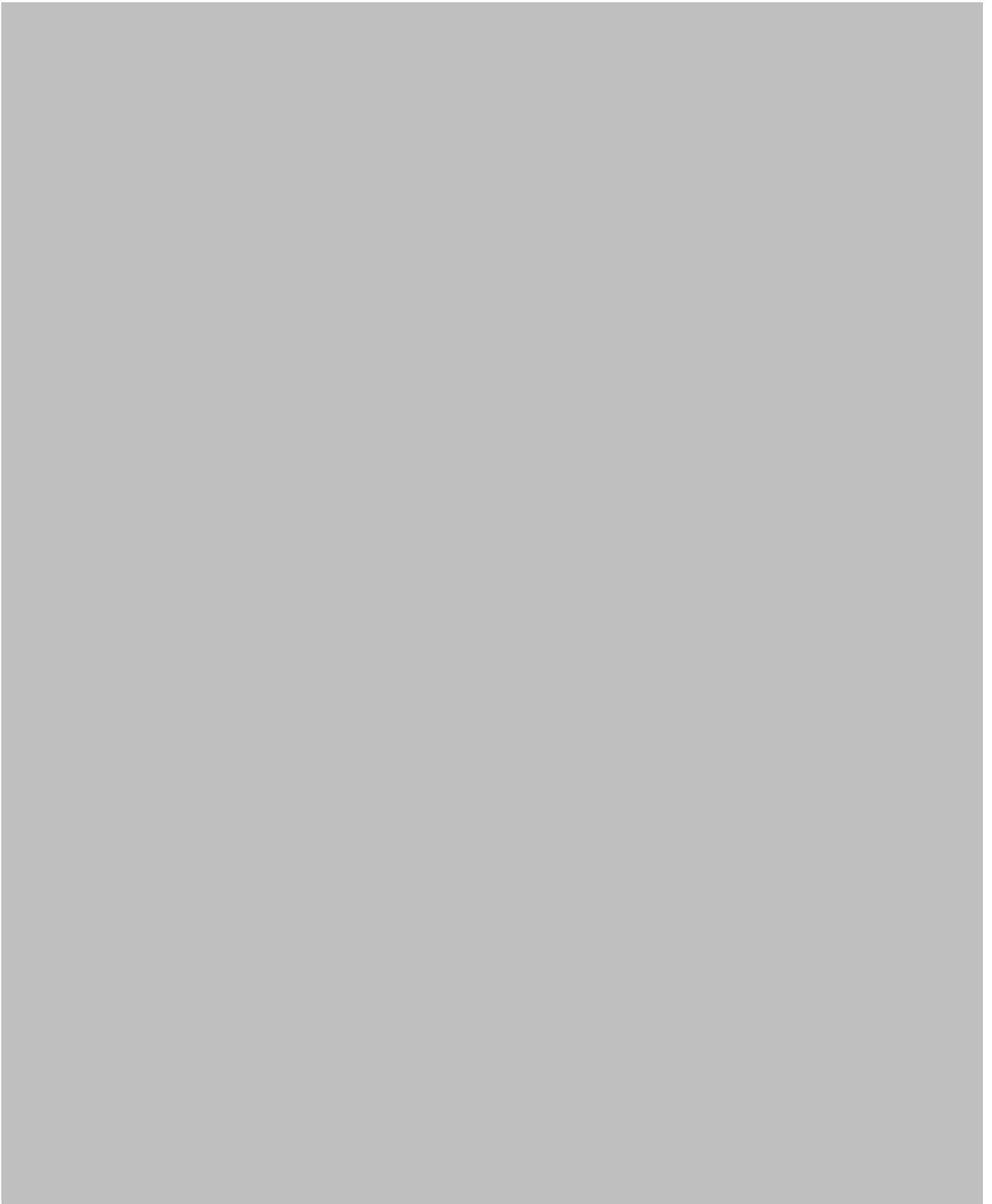




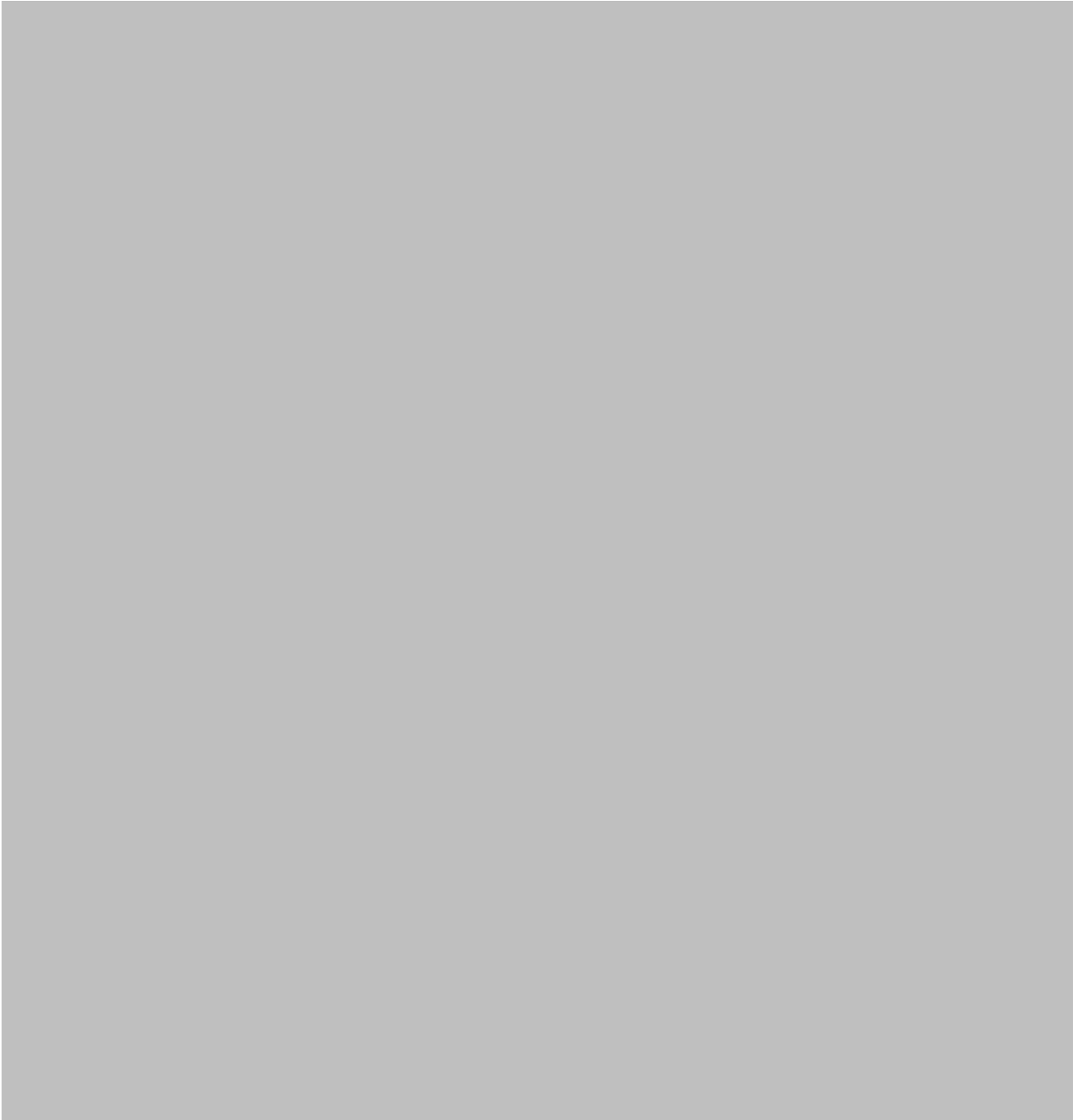
Appendix H



Appendix I



Appendix J



Appendix K

Coding Dictionary

*All information relating to the incident, perpetrator or victim relates to information held on in the West Midlands Police databases and does not apply to national police records.

Number of Children present at time of IPV incident:

Number of children at location of IPV incident, regardless of whether they directly witnessed the incident or not.

Did child/ren directly witness incident?

Did any of the children present at the location directly witness the directly incident, were in same room or direct area of the incident, or were directly involved in the incident.

Type of IPV incident-

Coded from police records of the gender of the victim and perpetrator of the IPV incident-

Male-Female

Female-Male

Female- Female

Male- Male

Reciprocal violence

Alleged relationship of IPV perpetrator-

Coded from police records at time of IPV incident-

Biological parent to at least one child in the household

Non-biological parent

Lodger

Non biological parent ex-partner

Nature of incident-

Verbal abuse

Threatens to harm mother or children and/or to self harm

Threatens to kill or seriously injure mother and/or children

Intimidation-pushing, shoving, finger poking

Destruction of property

Physical assault- victim not injured

- victim received minor injuries (scratches, scrapes, light bruising)

- victim received injuries requiring medical attention

- Strangulation/choking

Harassment- phone calls, messages, repeated unwanted contact

Did victim of IPV incident seek medical attention?

Coded as present if police records show that victim visited A&E or GP directly as a result of injuries sustained during IPV incident. This item was coded as not present in police records show

that no medical attention was sought for injuries directly related to IPV incident.

Was the alleged perpetrator living in the family home?

The item was coded yes if police records indicated that the alleged perpetrator was living at the same address as the victim at the time of the IPV incident.

Was a civil injunction or other protective orders/bail condition/injunction breach?

Yes- Client had court/police imposed order to restrict contact/communication with perpetrator which was violated during the incident.

No- No protective order was in place during incident

Age of Alleged Perpetrator:

Age in years at time of IPV incident

Age of Victim:

Age in years at time of IPV incident

Ethnicity:

As coded in the IPV incident log held in the police database:

- White European
- White Other
- Mixed White and Black Caribbean
- Mixed White and Black African
- Mixed White and Asian
- Mixed Other
- Asian or Asian British Indian
- Asian or Asian British Pakistani
- Asian or Asian British Bangladeshi
- Asian Other
- Black or Black Caribbean
- Black or Black African
- Black other
- Chinese
- Any other
- Not Stated

Was the alleged perpetrator experiencing issues related to substance use or dependence at the time of the offence?

This item was coded as present if there was any indication from victim/perpetrator/witnesses/police officers/ambulance crew that the alleged perpetrator appeared under the influence of drugs or alcohol at the time of the offence.

Does the alleged perpetrator have a history of or recent mental health concerns or expressed recent suicidal intent:

This item was coded as present if there was any indication from

victim/perpetrator/witnesses/police officers/ambulance crew in the police records that alleged perpetrator had a history of mental illness, appeared mentally unwell at the time of the incident or had expressed suicidal intent or had attempted to commit suicide in the previous 12 months before the IPV incident.

Does the victim supports prosecution of IPV alleged perpetrator:

This item was coded as present if the victim was willing to complete police interviews and press charges against alleged perpetrator of the IPV. The item was coded as not present if the victim refused to give information to the police about the IPV incident or alleged perpetrator or refuses to press charges against the alleged victim.

Previous substance use charges: Present if one or more charges for an offence contravening the Misuse of Drugs Act 1971 class A, B or C drugs (possession, possession with intent to supply) committed in the West Midlands.

Previous IPV incidents between alleged perpetrator and victim:

This item recorded all IPV incidents responded to West Midlands police involving the victim and the alleged perpetrator in the past. This included all recorded incidents on the police database, regardless of the type of abuse (verbal abuse, threats to harm, kill or seriously injure, intimidation, destruction of property, or physical assault) and regardless of whether the incident lead to the arrest or conviction of the alleged perpetrator.

Current IPV Incident Leads to Arrest of Alleged Perpetrator

This item was coded as present if police records indicated that the alleged perpetrator was arrested in relation to the IPV incident, whether it was at the time of the offence or at a later date. The item is coded as not present if the alleged perpetrator was not arrested for the IPV incident, either at the time of the incident or at a later date.

Current IPV Incident Leads to Charges for Alleged Perpetrator

This item was coded as present if police records indicated that the alleged perpetrator was officially charged with an offence relating to the IPV incident, this included receiving a caution for the offence. This item is coded as not present if there are no custody records on the police database that indicate that the perpetrator was charged with any offence in relation to the IPV incident.

Was the mother pregnant at the time of IPV incident?

This item is coded as present if police records indicate that the mother was pregnant at the time of the IPV incident.

Charges for violence of ex-partners or others

This item was recorded as present if the police records indicate that the alleged perpetrator has one or more previous charges contravening Section 47 for assault (occasioning actual bodily harm ABH), common assault (battery), Section 18/Section 20 grievous bodily harm (GBH) towards an ex partner of any other individual committed in the West Midlands.

Charges for any other offences: Record as present if one or more charges for any other illegal activity documented by the West Midlands Police.

Previous threats to kill or harm: Account from victim/perpetrator/witness/police/other professional that the perpetrator has previously threatened to kill or harm the victim physically. Can be either documented on police database or verbally at the time of the incident.

Number of IPV incidents during year follow-up period

This item relates to whether police records indicate that West Midlands Police attended an IPV related incident between the named alleged perpetrator and victim from the initial incident between the dates of 1st March 2010 until 1st March 2011. Incidents that do not result in arrests or charges are included in this item.

Number of incidents of physical abuse during the year follow-up period

This item relates to any IPV incidents that took place between the alleged perpetrator and the victim of the index IPV incident. All incidents that took place between February 2010 and March 2011 in which the alleged perpetrator was charged with an offence involving the use of physical violence against the victim are recorded by the West Midlands Police.

Number of incidents of breach of parole/bail conditions or non-molestation orders during year follow-up

This item relates to any charges against the alleged perpetrator recorded on the West Midlands Police database between February 2010 and March 2011 which relate to any breaches of the alleged perpetrator's parole conditions, bail conditions, or non-molestation orders during this time.

Alleged perpetrator has past violation of conditional release or community supervision?

This item was coded as present if the police records show that the alleged perpetrator has an offence from any time before February 2010 that relates to a violation of conditional release or any type of official community supervision order.

Past violation of no contact order

This item was coded as present if West Midlands police records indicated that the alleged perpetrator had a conviction before February 2010 for an offence relating to the violation of a no contact order against any individual.

Recent relationship problems

This item was coded as present if police records indicated that there had been relationship between the alleged perpetrator and victim of the IPV incident had ended at any point in the 12 months prior to the recorded IPV incident. This item was still coded as present if the couple later got back together or were together at the time of the IPV incident.

Severe violence or sexual assault committed during current offence

This item focused on the violence used during the index offence only. This item was coded as present if the victim suffered injuries for which medical attention had to be sought or if police records indicate that a sexual assault was alleged to have taken place during the IPV incident.

Use of weapon during index offence

This item was coded as present if police records indicate that the alleged perpetrator used a

weapon against the victim during the index IPV incident. A weapon was considered to be a knife, gun, or any object used as a club to hit the victim.

Cases referred to MARAC during the year follow-up

This item relates to any referrals made to MARAC from February 2010 until March 2011 involving the victim or any of the children involved in the original IPV incident.

Additional screening during the year follow-up

This item relates to any records of additional Multi-Agency Joint Screening team undertaken for the alleged perpetrator and victim

Appendix L

Information sheet for Joint Screening Professionals

INFORMATION ABOUT THE STUDY

Examining the efficacy of the Domestic Abuse Risk Assessment Protocol

Why is this study being done? This project will evaluate the validity of the Domestic Abuse Risk Assessment used in the West Midlands. That is, how effective is it in identifying the risk and needs of children who reside in a family where an incident of intimate partner violence has been reported to West Midlands Police? This is a pilot study, limited to Birmingham South – we may be able to evaluate the efficacy of this tool across the West Midlands after this pilot work. Incidents of ‘domestic abuse’ will be refined to partner violence in this study - to ensure consistency across cases in a resource limited study, and because this type of family violence has been highlighted to pose the biggest risk to children in the literature.

Why am I being asked to take part? Because you form part of the Multiagency Joint Screening Meetings that scrutinises referrals for Birmingham South and therefore have the knowledge to tell us about the utility of this protocol.

What will I be asked to do? You will be asked to attend a short focus group with your colleagues and a researcher. It will take about half hour to talk about your experiences of the Domestic Abuse Risk Assessment Protocol. You and your colleagues attending the group will also be asked to rate the risk level of a fictitious case – so that we assess how reliable the ratings are. The interview will be audio taped; this is only so that the researchers can remember what you said. Once we have analysed the interview, the tape will be destroyed. You will not be asked to tell us any identifiable personal detail, like your name and address, the study is anonymous. You can use a made up name during the interview so we can match what you say to a pseudonym in case you decide to remove your responses at a later date.

What are the benefits of taking part? You will be helping to determine the utility of the Domestic Abuse Risk Assessment Protocol and offer your suggestions for maintenance of good practice or areas of improvement. Professionals usually enjoy talking about their experiences and often find telling their story a positive and helpful experience.

Do I have to take part? You do not have to take part. If you choose not to, this will not affect your career in anyway. If you do decide to take part you can pull out of the study at any time, even during the interview. If you start the interview and then decide to stop part way through, we will ensure that any information you have provided us with will not be used in the study. If you get home and decide you do not want us to use your data for any reason you can simply contact Louise Dixon ([REDACTED]) up to 1 month after completing the interview and let her know your pseudonym and she will ensure your contributions are not included in the study.

Will what I say be kept confidential? Your names and position will not be included in any write up of the information. There is no need for you to disclose any personal to the researcher. All tapes and transcripts of the

interview will be kept in a locked cabinet in the psychology department at Birmingham University until they are destroyed.

What happens when the research stops? When the study is finished a report summarising general results of the study will be provided in the form of an oral presentation to professionals working in children services in the UK and a Journal article, which we will send you a copy of, if you agree. Your name or personal details will never appear in the report.

Who is organising the research? This study is organised by The University of Birmingham.

Thank you for your time

Appendix M

Consent Sheet for Joint Screening Professionals

Consent Form

Please choose a pseudonym that you can remember and write it below. This is so that if you choose to withdraw from the study you can do so anonymously, without telling us your real name, you can simply quote the below made up code word.

.....

Please feel free to ask any questions about taking part in the study. By signing the below form you are showing that you understand and agree to the following:

- I understand that I am being asked to participate in a research project being carried out by researchers at the University of Birmingham.
- I have been informed in writing about the nature and purpose of the study, that the interview will be audio recorded and I have had the opportunity to discuss this in person with the researcher.
- I understand that I do not have to take part in this study and, if for any reason I am unhappy about participating, I can withdraw from the study at any time (including up to 1 month after completing the interview) and ask for my data to be excluded from the study without explaining my decision and at no consequence to me or others.
- I understand that taking part in this study (or withdrawing from the study) will not affect my career in any way.
- I will not be asked to tell anybody my name or any other personal details about me. I will be asked to give a made up name – and state this above - in case I decide to remove my responses at a later date (up to 1 month after completing the interview).

By signing my pseudonym below, I understand that I am consenting to participate in this study conducted in association with the University of Birmingham.

Signed:

Witness name and signature:

Date:

Date:

Appendix N

Focus Group Interview Schedule

The focus groups will be conducted using semi-structured interview questions that will be asked at each of the four screening teams in Birmingham. Responses will be given in an open forum format of approximately 3-4 Joint Screening professionals and will be transcribed and coded anonymously:

- Please describe what happens in Birmingham South from an incident of domestic abuse being reported to the West Midlands Police through to professionals deciding on the successful outcome of a case.
- In your opinion, is the Joint Screening process useful?
 - What is good about it?
 - What is not so good about it?
 - How could the process be improved?
- Do you feel that Joint Screening teams are consistently provided with enough information from the different agencies to make a decision about the risk level of a case?
- How do you decide if a case has a successful outcome or not?
- Do you routinely review or evaluate the outcome of cases and if so how often?
- In your opinion, is the Multiagency Domestic Violence Risk Identification Threshold Scales (MDVRITS) easy to adhere to?
 - What is good about it?
 - What is not so good about it?
 - How could the process be improved?
- In your experience, do you feel the MDVRITS accurately places incidents in the correct scale (1-4)?
- Do you find it is easy to categorise cases according to the definitions of each MDVRITS risk scale?
- If two different professionals were to review the same case, how likely do you think it is that they would assign the same risk level to that case using the MDVRITS? And why?
- From reviewing the data so far it is clear that cases are scored as level 3 least often. Why do you think this is?